

ISSUED EVERY WEDNESDAY

LIBRARY

RECEIVED

DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG & CHEMICAL MARKETS" U.S. Department of Agriculture

Entered as second-class matter Dec. 7, 1914 at New York Postoffice

D. O. HAYNES & Co. Publishers No. 3 PARK PLACE NEW YORK U. S. A.

SUBSCRIPTION:—U. S., CUBA AND MEXICO, \$4.00; CANADA, \$4.50; FOREIGN, \$5.00 A YEAR IN ADVANCE

VOL. V

NEW YORK, DECEMBER 24, 1919

No. 68

Oil Apricot Kernels

Pressed at National City, Calif.

W. J. BUSH & CO., Incorporated

100 William Street

New York

H. A. METZ & CO., Inc.

122 Hudson Street NEW YORK, N. Y.

Dyestuffs, Colors, Sizing and Finishing Materials

Produced by

Consolidated Color & Chemical Co., Newark, N. J.

Dyestuffs and Intermediates

Produced by

Central Dyestuff & Chemical Co., Newark, N. J.

Garrigues Industrial Products Corp.

54 Wall Street, New York City

NITRITE OF SODA 96/98%

NORWEGIAN

NITRATE OF AMMONIA 99.8%

NORWEGIAN

MERCK & CO.

Chemicals

St. Louis

NEW YORK

Works at Rahway, N. J.

Montreal

Cable Address, "Grayline"

Phone John 4500-1-2-3

William S. Gray & Co.,

80 MAIDEN LANE, N. Y.

Manufacturers Representatives

ACETATE OF LIME, WOOD ALCOHOL

DENATURED ALCOHOL

ACETONE, KETONE, ACETONE OILS

Correspondence Solicited

Agencies and Consignments

Drugs, Chemicals, Oils, Dyes

Financed and Marketed

F. E. CHILDS CO., Inc.

79 Front Street, New York

Cables: Fechileo, Newyork.

All Codes Used

We offer for Prompt or Future Shipment:—

Acetanilid
Acetyl Salicylic Acid (Aspirin)
Acetphenetidin (Phenacetin)
Phenolphthalein
Salicylic Acid
Soda Salicylate
Salol

Saccharin
Glycerophosphates
(Calcium, Sodium, Potassium, etc.)
Caffeine
Chloral Hydrate
Vanillin
Coumarin

We solicit your inquiries

Monsanto Chemical Works

ST. LOUIS, Mo.

NEW YORK, MONSANTO BUILDING, 12 PLATT STREET

PRECIPITATED CHALK { **EDWARD P. MEEKER, Agent**

68 Maiden Lane, New York City

Write for prices and samples

Phone John 6346

What three leading advertisers say about Drug & Chemical Markets



The World's Standard for Zinc Products

You will be glad to know that we will soon start the new schedule of advertising in DRUG & CHEMICAL MARKETS, which will double the space used during 1918.

We heartily believe in DRUG & CHEMICAL MARKETS and regard the field you cover as one that is valuable for exploiting the New Jersey Zinc Company and its products.

N. J. ZINC COMPANY,

March 27, 1919.

C. A. Stedman, Adv. Mgr.

The Pfaudler Co.
Rochester, N.Y.

We want you to know that we are getting most satisfactory returns from our advertisements in DRUG & CHEMICAL MARKETS. We have had sufficient response to convince us that your journal is read and by the right people.

We believe that the strictly informative character of the material you publish secures the continued interest of your reader public and that it attracts the attention of those who have the actual buying in hand.

THE PFAUDLER CO.

April 26, 1919.

Lawrence C. Stahlbrodt, Adv. Mgr.

The *Barrett* Company

I am pleased to be able to express this company's appreciation of DRUG & CHEMICAL MARKETS. We find it one of the liveliest and most interesting publications from the reader's point of view, and believe the lines on which you are conducting it to be fundamentally right.

We have been advertising in it over two years, and would not want to be left out of your list of regular advertisers.

THE BARRETT COMPANY,

May 26, 1919.

Chemical Department,

D. W. Jayne, Manager.

*We solicit your inquiries
for the following:*

Essential Oils

Oil Camphor (Bi-product)
Oil Cloves, Zanzibar, U.S.P.
Oil Pimento Berries
Oil Thyme, White, U.S.P.
Oil Wintergreen (Methyl Salicylate)

Special Pharmaceutical Chemicals

Barbital (Diethyl Barbituric Acid)
Barbital Sodium
Eucalyptol

Synthetic Perfume Chemicals

Benzaldehyde, U.S.P.
Benzyl Alcohol
Geraniol, Standard, A.C.
Heliotropine
Terpineol

"Chiris" Distilled Floral Waters (Concentrated)

Orange Flower, U.S.P.
Cherry Laurel
Elder Flower

"Chiris" French Olive Oil

Packed in 5-gallon tins, 1-gallon tins, 1/2-gallon tins.

Orris Root

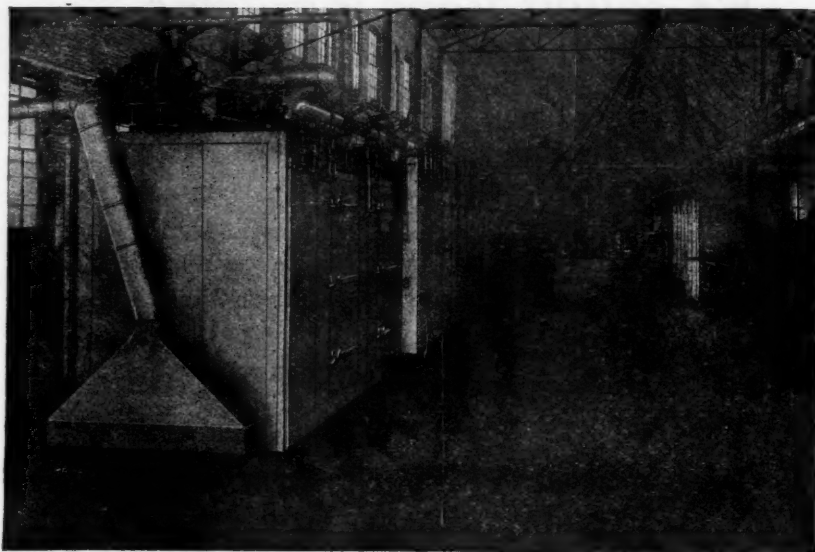
Bold, Powdered, Granulated.

ANTOINE CHIRIS COMPANY

18-20 Platt Street

New York

Works, Delawanna, N. J.



Battery of four Gordon Dryers, part of an installation operated by a leading manufacturer of chemicals and dyes. We have a dryer for every problem with capacities as small as 50 sq. ft. of drying space. Tray dryers, shelf dryers, compartment dryers, tunnel dryers and continuous conveyor type dryers are the backbone of our line.

Are You Convinced?

If after reading the next two paragraphs you remain convinced that your present drying system cannot be improved upon—pay no attention to the insert at the right. But if you think there is something in what we say—then your course is obvious.

Gordon Dryers are designed and built to shorten the time of drying; to save heat and power consumption; to eliminate all possibility of product deterioration; and to save valuable floor space.

And Gordon Dryers do these things. In each item they materially reduce drying costs.

Are you still satisfied that your drying process cannot be improved? Then read and immediately act upon the insert at the right.

GORDON DRYER CORPORATION

Room 620

39 CORTLANDT STREET

NEW YORK

Gordon Dryers

For Chemicals, Colors, Dyes, Pharmaceuticals and similar materials.

Send us about a 5 lb. sample of your product. We will dry it and return it to you with a record sheet of the operation. The record sheet will show you—

- the time required to dry
- the moisture content
- the temperature at which dried
- the percentage of moisture evaporated per hour
- the total amount of moisture removed

and various other facts relating to your particular material. This service is free of charge and implies no obligation. The facts will indicate the proper course for you to pursue. Our laboratory is located at Bush Terminal Bldg., No. 3, 253—36th Street, Brooklyn, N. Y.

ISSUED EVERY WEDNESDAY

DRUG & CHEMICAL MARKETS

ESTABLISHED IN SEPTEMBER 1914 AS "WEEKLY DRUG MARKETS"

VOL. V

NEW YORK, DECEMBER 24, 1919

No. 68

Entered as second-class matter, Dec. 7, 1914, at the post office at New York, N. Y., under the Act of March 3, 1879.

DRUG & CHEMICAL MARKETS

PUBLISHED EVERY WEDNESDAY

D. O. HAYNES & Co., Publishers, . New York

Publication Office: No. 3 Park Place.

Telephone, 7646 Barclay . . Cable Address, "Era, New York."

SUBSCRIPTION RATES

United States, Cuba and Mexico.....\$4.00 a year
Canada \$4.50 and Foreign \$5.00 a year

Single Copies, 10 cents

ALL SUBSCRIPTIONS PAYABLE IN ADVANCE

REMIT by P. O. or Express Order or New York Draft payable to order of D. O. Haynes & Co. Add 10 cents for collection charges if you send local check.

Published at No. 3 Park Place, Borough of Manhattan, New York, by D. O. Haynes & Co., a corporation; President and treasurer, D. O. Haynes; vice-president, E. J. Kennedy; secretary, N. W. Haynes. Address of Officers is No. 3 Park Place, New York.



A BINDER
FOR THIS JOURNAL

Save Your Copies

Price \$1.00 net Cash, postpaid

Table of Contents

EDITORIALS—

Italian Trade and American Politics	5
Easing the Troubles of Workers	5
Trying to "Rattle" the Drys?	6
To Our Subscribers	6

FEATURE TRADE ARTICLE—

War Demand for Paint and Varnish Oils, by Charles V. Bacon, Chemical Engineer ...	7
--------------------------------------------------------------------------------------	---

TRADE NEWS—

Monsanto Co. Makes Strong Defense in Government Saccharin Suit	9
Foreign Trade at New High Record	10
Chemical Industries for the South	11
U. S. Production of Fats and Oils	12
Use of China Wood Oil in Varnish	13
Output of Quicksilver Smaller	14

MARKET REPORTS—

Drugs and Chemicals	16-17
Essential Oils	18-19
Heavy Chemicals	20-21
Colors and Dyestuffs	22-23
The Oil Markets	24-25
Foreign Markets	26-27

PRICES CURRENT	28-39
IMPORTS	40-42

Italian Trade and American Politics

American chemical and drug industries have long enjoyed intimate and profitable trade relations with Italy. Italian vegetable oils, sulphur, borax, argols, crude drugs, citrus essences and citrates, are articles of world commerce in which we have long dealt. Moreover, Italy has been a good customer, particularly for fertilizers and insecticides, and the industrial developments in the north of Italy, which have received great stimulation during the war, promise to become a valuable market for American heavy chemicals and dyestuffs.

Ever since the Italian crisis at the Peace Conference there has been a marked falling off in the volume of our trade with Italy. American dye manufacturers were the first to note this, and they found their sales severely cut long before the question of exchange entered into export calculations. Those in our industries who have been in close commercial relationship with the Italians know that more than the restrictions of their government, more than the adverse rate of exchange, more than the shortage of cargo space, the feelings of the Italians themselves have affected, to our detriment, our trade with their country.

Quite aside from the question of whether or not President Wilson's policy towards Italy, at the Peace Conference and since, has been just or expedient, it is plain that the Italian government and the Italian people resent this. Their resentment takes form in what, to practical purposes, amounts to an informal, but quite effective, discrimination against this country and its industries. Italy, therefore, furnishes a good example of the very direct bearing which American foreign policies have upon American trade, and aside from any question of domestic politics, our drug and chemical industries have a vital monetary interest in our national foreign affairs. Business is business, but good business is not the sole determining factor in commercial transactions. National good will is as intangible, and quite as valuable an asset as is personal popularity, and now that our chemical industries are entering more and more into the world's markets, the leaders of these industries must express more and more definitely their opinion as to foreign policies. This means a new point of view, both to our American industry and to American politics, but it is a point of view which both our business and our political leaders should quickly and surely take.

Easing the Troubles of Workers

Women employed in plants where dyes are manufactured often quit when they find their hands turning yellow, or a green shade creeping into

their blonde or raven hair. Sometimes they protest vigorously at the scarlet tinge on the end of the nose which will not rub off. Even the men become discontented. The industry has expanded in the United States until it now employs thousands of workers, and the question of retaining permanent help is an important factor in its development.

With a view to aiding manufacturers in ameliorating the conditions complained of, the National Safety Council is making a study of the situation and has sent a questionnaire to manufacturers for information concerning skin diseases prevalent in the industry. In plants where color pigments and dyes are manufactured, or in which anilin oil and its derivatives are used, workmen often suffer from skin affections. Full information about such cases will aid the National Safety Council in its study of methods of treatment, or develop preventative measures which will benefit the industry by making the work less objectionable.

To Our Subscribers

There is no present means by which the current history of the commercial aspects of the American chemical and drug industries is available for reference use, and in response to repeated requests from subscribers, we shall publish, with each future volume of *DRUG & CHEMICAL MARKETS*, a complete index.

This work is being done for us by a librarian experienced in technical chemical work, and cross references will make it possible for subscribers, who preserve their copies, to refer readily to firms, associations, individuals, statistics, products, prices, etc.

Beginning with our issue of January 7th, we start a new volume. Hereafter, instead of one annual volume from September to September, we shall publish two volumes a year, from January to July and July to December. This change is made necessary by the increased number of our pages, as we are anxious to keep the volume a reasonable, handy size.

Entering upon the sixth year of publication, *DRUG & CHEMICAL MARKETS* shows a growth in the number of subscribers, which convinces us that our policy of publishing promptly, accurately, and independently the news and prices of the industries in compact form is fast being recognized as an indispensable service. It is more becoming for us to point to past accomplishments than to promise future plans, but we want to take this opportunity to assure our readers that we intend that *DRUG & CHEMICAL MARKETS* shall continue to improve. We feel that our appreciation of their confidence and support can best be expressed by serving the interests of the American chemical and drug industries as efficiently as we are able.

Trying to "Rattle" the "Drys"?

A charter recently granted to a remedy company by the State of Maryland gives the organizers the right to buy rattlesnake farms, rattlesnakes, rattlesnake oil, and to develop the by-products of the rattlesnake industry. The company has an auth-

orized capital of \$1,000,000 which should be sufficient to buy a good many rattlesnakes unless somebody bulls the rattlesnake market and raises the price beyond what any conservative rattlesnake ever dreamed he would be worth.

There is a lurking suspicion that the Baltimore men back of the organization have a big idea. Everyone familiar with home remedies knows how to cure a rattlesnake bite, and many a thirsty man has been bitten by snakes and applied the remedy copiously. Now that the Volstead bill for the enforcement of war-time prohibition and Constitutional prohibition is in force, the only perfect cure for rattlesnake bite is unobtainable. A substitute which satisfies the law as well as the victim has millions in it. If the remedy is all right there is no limit to the business which the company can do. We wish we had thought of it first.

An insidious thought that should be banished from the mind without consideration, even for a moment, creeps in here. Could the "Wets," with devilish ingenuity, have formed a plot to corral the rattlesnakes and sic them onto the "Drys" to prove that whiskey is a necessity? We cannot believe it. No, the enterprise is undoubtedly a legitimate business venture for the manufacture of a remedy for exterior application, not interior, and after all the reptile's by-products are removed he will probably be dead, and fit for fertilizer only.

THE BUSINESS SITUATION

The remarkably large domestic and foreign consumption of commodities, in combination with restriction of outputs from one obstacle or another, has caused a shortage of goods that is nearly everywhere complained of, and which tends to obstruct operations in not a few instances, says "Dun's Review." Winter has brought added handicaps to various industries in the way of zero temperatures and storms, both East and West, and the ending of the recent mining troubles has not meant an immediate abandonment of all of the limitations of the marketing and use of fuel. The prospect, therefore, does not seem bright for an early amelioration of the scarcity of goods through expansion of production here, but a measure of relief may be afforded in some lines by increased imports from abroad, notwithstanding the reported economic distress and disorganization in Europe.

Following its recent abrupt fall to the previously unknown figure of about \$3.65, sterling exchange rallied with such violence this week as to give conclusive proof, though none was needed, of the presence of speculative influences in the market. An advance of some 25 cents in the London rate within a few days did not result from natural economic causes, but was largely the outcome of a rush to cover by "shorts" that was impelled mainly by the passage of the Edge bill by Congress. This development had a prompt effect in improving sentiment in financial circles, and was one of the week's factors in the betterment in stock prices. So far as a permanent correction of the extraordinary exchange position is concerned, the remedy clearly lies in a reduction of the huge excess of American exports over imports, reaching \$3,400,000,000 in ten months of 1919, which has been carried over from the war period.

A consignment of German dyes and chemicals has reached England. About 650 tons are ready for distribution at Manchester.

War Demand for Paint and Varnish Oils

High Cost of Linseed Oil Leads to Extended Use of Many Imported Products as Substitutes

By MAJOR CHARLES V. BACON, Chemical Engineer, New York

DRYING and semi-drying fixed or fatty oils are largely consumed in the manufacture of paints, varnish, linoleum, oil-cloth, printing inks and products of a similar nature, where their drying properties, or ability to absorb oxygen, make them invaluable.

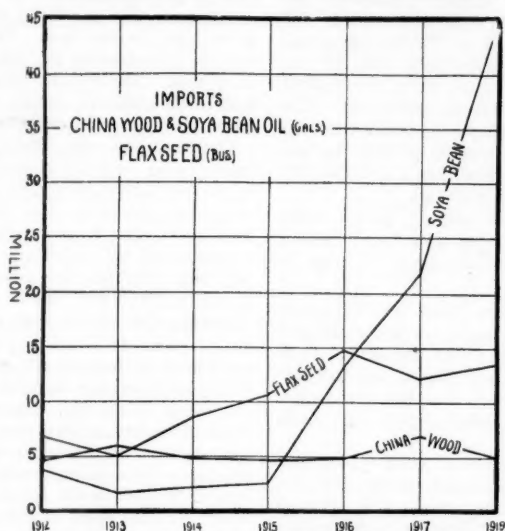
The chief exceptions to this are linseed and soya bean oils. The former in past years was used extensively in potash or soft soaps, often termed automobile soaps, but in recent years the high price of linseed oil has made its use for the soap kettle impossible. Fortunately, soya bean oil has been available in quantity, and now this oil, or corn oil, is very extensively used and gives a similar product which works out substantially the same, for all practical purposes. Fish oil, when made into a soft soap, is very similar in its working qualities, but has not met with much favor in this country, due to its peculiar and seemingly unsatisfactory odor, though it is much cheaper in price.

Fluctuations in Linseed Oil

Within the past year linseed oil, the one product which is more or less the predominating vehicle in practically all paints and varnishes, has been subject to marked fluctuations in price. This has been occasioned to some extent by the advanced cost of labor and raw materials, but the main reason has been that the supply was inadequate to the demand. This clearly indicates the desirability of increasing our acreage in flax, and the necessity of further development of other resources, for procuring other oils of at least a semi-drying nature that may be used in conjunction with linseed oil as the vehicle in mixed paints and varnishes.

It is quite true that the demand for ready-mixed paint and varnish and special protective coatings for ships was, due to the war, abnormally high, and it has clearly shown that paint, varnish and even shellac must be regarded as strategic materials.

Flaxseed was available from Argentina, but the reports indicate that it was in the hands of German holders who were reluctant to release it, both due to their sympathies and their opinion that the war would soon be over and then European markets would pay fancy prices. We were further handicapped by not having sufficient bottoms to divert from European lanes, although it has been reported that the Navy or Emergency Shipping Fleet Corporation sent to Argentina



Imports of China Wood and Soya Bean Oil in Gallons, and Flaxseed, in Bushels, During Seven Years

and brought back several cargoes of seed which were crushed and pressed in the States.

The War Department was alive to the situation and, by co-operation with the Paint Manufacturers' Association, made the formulae of ready mixed paints, where practical, sufficiently open to permit the use of fish, soya bean and China wood oil or a mixture thereof, with linseed oil, and as a means of protection required specific performance. Such a method of procedure may be subject to criticism, but one has to admit that it did facilitate deliveries, which was of paramount importance. It also placed the paint manufacturer in a position where it was up to him to produce the best possible product, putting

him, so to speak, on his honor, and it is very gratifying to be able to say that the shortcomings were exceptionally rare, and the paint supplied, as a whole, was satisfactory.

Imported Oils

The paint and varnish industries are dependent, to a large extent, upon Oriental oils, especially Tung or China wood oil, which is the basis of practically all good reasonably priced varnishes, while soya bean oil, the importation of which in 1918 exceeded forty-four million gallons, is used largely as a vehicle in ready-mixed paints mixed with linseed oil, and also in the varnish and linoleum industries.

Other oils available for paint purposes are perilla oil, which has excellent drying qualities, also tallow seed and lumbang oils, all of which have been imported, but the amounts are not available. Of the three oils, perilla oil comes nearest to replacing linseed oil. There are also the imported fish and blubber oils, some of which find limited use in the industry, after being properly treated. The imports and exports from 1912 to 1918 follow:

	Linseed Oil Imp. Gals.	Linseed Oil Exp. Gals.	Flax Seed Imp. Bush.	Soya Bean Oil Imp. Gals.	China Wood Oil Imp. Gals.
1912	737,256	246,965	6,841,806	3,734,838	4,767,596
1913	175,690	1,733,925	5,294,296	1,645,358	5,996,666
1914	192,535	239,188	8,653,235	2,181,394	4,932,444
1915	535,291	1,212,133	10,666,215	2,560,870	4,940,350
1916	50,148	714,120	14,679,233	13,082,626	4,968,262
1917	110,908	1,201,554	12,393,988	21,692,031	6,864,119
1918	50,327	1,187,850	13,366,259	44,909,947	4,815,740

Linseed Oil—The quantity of linseed oil produced in the United States ranks third in gallonage, leading the drying and semi-drying oils, and exceeds, in 1918, forty-eight million gallons. It is obtained from the

seed of the flax plant, by submitting the seed to hydraulic pressure or by the use of an expeller which operates on the principle of a screw. Some small quantity is produced by extraction with volatile solvents, but, for some reason, extracted oil seems not to meet with much favor.

Linseed oil is subject to adulteration, notwithstanding the laws in many States prohibit this. The principal test is the iodine number, but other tests are essential to detect adulteration. The American Society for Testing Materials have certain defined standards for raw linseed made from North American seed, the minimum iodine number being 180 by the Hanus method. The War Department specifications call for an iodine number of 170, and all other tests correspond to the American Society for Testing Materials. The lower iodine number was resorted to in order that deliveries might be facilitated and also to permit the use of oil obtained from South American seed, and thereby extend the quantity of available material.

Linseed oil is marketed as raw, refined, boiled, light and heavy blown raw oil and light and heavy blown boiled oil, in addition to special products for use in varnish manufacture.

Soya Bean Oil—The soya bean, from which the oil is obtained, contains on an average of about 18 per cent of oil but may run as high as 23 per cent. It is extensively cultivated in China and Japan and has become of special importance within the last ten years. It is shipped mainly from Manchuria, the soya bean center of the world.

Soya bean oil is between the class of semi-drying and drying oils; it dries better than semi-drying oils but not as well as linseed and the paint and varnish trades, looking around for something to replace linseed oil, at least partially, have found this oil valuable. Today it is widely recognized and extensively used, not only in paint and varnish but also in oil cloth, linoleum, printing inks and products of a similar nature. Prior to the European war a factory was established in Germany for making a rubber substitute from this oil.

The oil is also largely used as a soap making material and, as an article of food, is becoming well recognized as a salad and cooking oil, while the cake remaining after pressing the seed is highly nutritious and makes a good cattle or human food when properly handled.

As to the industry becoming a factor in this country, at present there is considerable doubt in the writer's mind, and while the beans may be cultivated in the Southeastern States, it should be borne in mind that the yield of oil will be small. What is required to stimulate such an industry is the development of human food stuffs from the pressed oil cake, which, due to its high nutrition and low starch content, makes the possibility almost a probability. Some experiments have been and are being conducted by the Bureau of Chemistry of the United States Department of Agriculture, and the results are very promising.

There are several grades or qualities of soya bean oil offered, but for paint purposes it is desirable to use an oil expressed from properly harvested seed. It should be clear and free from dirt or sediment and, when heated to 550-600° F., should bleach in color and not break (throw out flocculent matter). The free fatty acid should not exceed 2 per cent and the iodine number be not much below 130, and preferably higher. Refined oil may be used, but it should be realized that refining, which means additional handling, has a tendency to reduce the drying qualities.

Menhaden or Fish Oil—This is obtained by render-

ing or cooking with water the menhaden which are caught off the Atlantic coast. It has been used as a paint material since the conception of paint, but, due to its characteristic odor and not drying to a hard film, was for a time practically abandoned by the paint and varnish industries. In recent years some manufacturers have learned more about this valuable oil and, after deodorizing it, use it. The trend in recent years is back to reasonable proportions of fish oil in paint, and those who can use it properly can generally produce a good product.

Oil from the northern menhaden, while not always to be had, is the best. It should be light pressed to remove the stearine and thereby cause it to have a good cold test. The acidity should not exceed 4 per cent and preferably the iodine number (Hanus) should be above 160, and 164 is better still.

Oriental fish oils have been recently invading our markets in increased proportion and will, no doubt, work out satisfactorily, in a manner similar to menhaden oils, provided they have a good iodine number and cold test, when used in the proper proportions with linseed oil and the proper dryer. Stack paint invariably contains fish oil, due to its ability to withstand heat and not blister.

Perilla Oil—Perilla oil is produced mainly in China and Japan. It is of a good yellow color, paler than soya bean or linseed oil, has excellent drying properties and possesses the highest iodine number of any fatty oil, being about 202. Samples examined by the writer were clear and bright, free from sediment and on heating showed no tendency to break. The characteristic property of forming drops after spreading, which is so much stressed in the current literature, was entirely absent. It has been imported only in limited quantities and gives all indications of being satisfactory for paint and varnish when properly handled, so much so that steps are now being taken in the Far East to crush quantities of this seed.

Lumbang Oil—The imports of lumbang oil have been limited, and all the samples, with one exception, that were examined by the writer were dark in color and high in free fatty acids.

It possesses drying qualities a little better than that of soya bean oil and would work out very satisfactorily for use in paints and varnishes, were the objections cited above in some way overcome. This could be accomplished by properly collecting and harvesting the seed prior to pressing.

The sources of supply are widely distributed. The Philippines would be able to produce quantities, if the cultivation were supervised with the necessary scientific skill. Recent advices indicate that there is on foot a plan to systematically collect the raw material and produce a constant supply of oil which will be good in color, free from dirt and of low acidity.

China Wood Oil—The largest use for China wood oil is in the manufacture of varnish, although considerable quantities are also used in the oil cloth, linoleum and printing ink industries, the paint manufacturers using only limited amounts.

It is also known as tung oil—the common name of the tree from which the seeds are obtained—and is practically all produced in China. The Japanese wood oil, otherwise known as kiri oil, is a different product, which does dry in a somewhat similar manner giving a frosted like film, but which acts entirely differently under heat. The main shipping center for China wood oil is Hankow, and the oil collected in this region is known as Hankow China wood oil. There is a limited amount shipped from southern China and and known

(Continued on Page 25)

CHEMICAL CENSUS BLANKS READY*(Special to Drug and Chemical Markets)*

Washington, D. C., Dec. 23.—Classification of the drug industry by branches, for purposes of the 1919 census of manufactures, has just been completed by E. F. Hartley, chief statistician of the Census Bureau. More than 350 classifications have been provided for convenience in separating industries. As a general rule, the classification of an industry will be determined in accordance with the product of chief value, the idea being to bring together so far as practicable all the establishments engaged in the same or kindred industries.

A general schedule has been prepared which will be used for every industry, but in a number of plants so many varieties of goods are produced that this schedule is not sufficient to cover them all, and, in such cases, and additional or supplemental schedule is provided. The drug industry is so diversified that practically every branch has been provided with an additional schedule.

Manufacturers of druggists' preparations and patent and proprietary medicines will use, in addition to general schedule No. 100, supplemental schedule 125. Manufacturers of chemicals will use supplemental schedule 118, but manufacturers of coal-tar chemicals will use supplemental schedule 119, the work in taking this census being done in co-operation with the Geological Survey. Chocolate and cocoa products will be reported on supplemental schedule 120; natural dyestuffs and extracts on schedule 126, and essential oils on schedule 129. Manufacturers of soaps of all kinds will report on supplemental schedule 162, and manufacturers of turpentine and rosin on 165.

The various schedules which will be used by the Bureau have been completed and printed, and the work of sending them out will begin soon.

COAL STRIKE COST \$126,000,000

The loss to the United States on account of the recent coal strike amounted to approximately \$126,000,000, while that to Ohio was about \$27,000,000, according to W. D. McKinney, secretary of the Southern Ohio Coal Exchange. Additional loss to railroads from curtailed service and to industries forced to shut down on account of the fuel situation could not be estimated and no allowance therefore is made in the estimate, Mr. McKinney stated.

The miners were the greatest losers in the strike, Mr. McKinney's figures showed. Sixty million dollars was his estimate of their losses in wages in the country. The loss to the railroads he placed at \$40,000,000, while the operators' figure he set at \$26,000,000.

SIX THOUSAND TONS OF ARSENIC

The white arsenic produced in the United States in 1918 amounted to 6,323 short tons, valued at \$1,213,000. By far the greater part of the domestic white arsenic consumed in the United States in 1918 was used in preparing insecticides and weed killers, the total quantity so used in 1918 being about 2,000,000 pounds, according to the United States Geological Survey, Department of the Interior. Nearly 1,000,000 pounds was used in the glass industry, and a small quantity in the preparation of drugs.

CHEMICALS DESTROYED BY FIRE

Fire in the plant of the Calco Chemical Co., Newark, N. J., on Dec. 21, caused damages of about \$10,000. John Elliott, a foreman was fatally burned by an explosion. The cause of the fire was said to be static electricity.

**MONSANTO CO. MAKES STRONG DEFENSE
IN GOVERNMENT SACCHARINE SUIT**

Four Witnesses Suffering From Diabetes Testify They Experienced no Bad Effects—Army Men Used it in France—U. S. Officials Claim it Retards Digestion

(Special to Drug and Chemical Markets)

St. Louis, Mo., Dec. 23.—The Government suit against the Monsanto Chemical Co. on a charge of violating the Pure Food and Drugs Act by the sale of saccharine, is being heard in the United States District Court here. The Government attorneys prepared food sweetened with saccharine and food sweetened with sugar for the jury to note the difference. Charles P. Williams, assistant Attorney General, said the Government proposed to show that saccharine has no food value and is harmful to the digestion.

Among the witnesses were Dr. Carl Alsberg, chief of the Bureau of Chemistry, Washington, Dr. W. W. Skinner and B. R. Jacobs, also of the Bureau of Chemistry, Drs. A. J. Carlson, of Chicago University, and Hugh McGuigar, of the University of Illinois, and Solomon Cohen, of Philadelphia, who testified that saccharine retards digestion.

Other witnesses introduced by the Government were Dr. Haven Emerson, former City Health Commissioner of New York; Dr. Victor C. Vaughan, dean of the university of Michigan Medical School; Dr. Horace W. Soper, a St. Louis specialist in digestive diseases; Dr. Ellsworth Smith, who holds the Chair of Clinical Medicine at Washington University; Dr. Albert E. Taussig, professor of internal medicine at Washington University, and Dr. Charles Hugh Neilson, who holds the Chair of Internal Medicine at St. Louis University.

Dr. Charles H. Blodgett of Boston, first professional witness to testify at length for the defense, said that in his opinion saccharine was harmless.

Many other witnesses for the defense were heard. Four of these witnesses were sufferers from diabetes, who testified that they had used saccharine for years in place of sugar, by physicians' orders, and had suffered no ill results from it. Five were former service men, who told of having eaten saccharine in France when sugar was not obtainable there and said there had been no bad effects.

The witnesses who said they were under treatment for diabetes were George W. Luehrman, Milton F. Williams, Thomas Kinsella, and Philip Landau, all of St. Louis. All said, in cross-examination that they used saccharine as part of a prescribed diet, and in regulated amounts.

The witnesses who based their testimony on their military experience in France were Maj. John F. Oberwinder, formerly of the 138th Infantry, now connected with the D'Arcy Advertising Co.; Capt. Sylvester C. Judge, formerly of the headquarters staff of the Thirty-fifth Division; John L. Hemp, Jr., who was a Sergeant in the headquarters company of the 138th; and George Gayou and Frank J. Mahon, who were in the American ambulance service.

John F. Queeny, head of the Monsanto Chemical Co., testified that saccharine was regularly used in his home, and that food containing it was eaten by all the members of his family.

A cablegram from Middlesborough, England, says a local engineer has succeeded in extracting commercial alcohol and its derivatives from coke. It is claimed that if the process, which requires the use of gas, is applied to all the coal carbonized in Great Britain an estimated yield of 50,000,000 gallons of motor spirits will be obtained annually, revolutionizing the supply and cost of liquid fuel.

FOREIGN TRADE AT NEW HIGH RECORD

Growth in Exports Largely in Manufactured Goods—Higher Prices Help to Swell the Estimated Value, But There Has Been a Material Increase in Quantities

The foreign commerce of the United States will make a new high record in the year which ends with this month. The grand total of imports and exports in 1919, according to an estimate by The National City Bank of New York, will be fully ten and one-half billion dollars against a little over nine billions in 1918 and 1917, less than eight billions in 1916 and slightly less than four billions in the year immediately preceding the war, 1914. Thus the trade of 1919 will exceed by more than a billion dollars that of any earlier calendar year and will be two and one-half times as great as immediately preceding the war.

This increase occurs in both imports and exports. The grand total of imports for the current year will exceed \$3,750,000,000 and the exports approximately \$5,800,000,000.

These figures, says the bank's statement, are all the more gratifying when we realize that the increase in exports occurs largely in manufactures, thus assuring labor of its participation in this feature of our prosperity, while in the imports, the increase occurs chiefly in manufacturing material. We had scarcely dared to hope that the tremendous increase in exports of manufactures which occurred during the war—largely to Europe for war purposes—would, with the return to peace and the cessation of demand for war manufactures, equal or even approximate that of the war years. But the figures thus far available indicate that the value of manufactures exported in the calendar year 1919 will be three and one-half billion dollars against slightly more than three billions in 1918, most of which fell within the war period, and more than three times that of the year immediately preceding the war, 1914.

This increase in our grand total of manufactures exported, says the bank's statement, occurs chiefly in its movements to the non-manufacturing sections of the world, which were formerly accustomed to draw their imports of manufactures from Europe. To Asia and Oceania, where manufactures form over 80 per cent of our exports thereto, the grand total of exports for the current year will be nearly \$900,000,000 against \$603,000,000 in 1918, \$547,000,000 in 1917, and less than \$200,000,000 in the year preceding the war. To South America, where manufactures form also about 80 per cent of our total, the year's figures will approximate \$450,000,000 against \$303,000,000 last year and slightly less than \$100,000,000 in 1914. To our neighbors of North America, which means Canada on the north, and Mexico, Central America, and the West Indian Islands on the south, the total will be about \$1,300,000,000 as against \$482,000,000 in 1914, and manufactures form more than one-half of that trade. To Europe, which is still demanding our foodstuffs and manufacturing material, especially cotton, the total will apparently approximate about \$4,000,000,000 as against \$3,859,000,000 in 1918, \$4,062,000,000 in 1917, the year of her greatest war demand upon us, and \$1,339,000,000 in 1914.

On the import side, where the growth is equally striking, the total will be about \$3,750,000,000 against \$4,031,000,000 in 1918, the former high record year. The chief increase occurs in manufacturing material which will total about \$1,650,000,000 against \$1,221,000,000 in 1918, and \$1,268,000,000 in 1917, the former high record year.

It is proper to add, says the bank's statement, in contemplating these huge figures of our foreign trade, the largest ever recorded, that "all is not gold that glitters." Much of this increase is due to higher prices, though there is undoubtedly a very material increase in quantities,

especially of manufactures. Prices of a very large proportion of the merchandise forming the foreign trade of the country, whether imports or exports, are double those of the calendar year preceding the war, when our total trade was less than four and one-half billion dollars as against an estimated ten and one-half billion dollars for the current year. Still another factor in the high figures of imports lies in the fact that the import figures, which are those of the valuation of the countries from which drawn, were accepted until recently at the nominal or face valuation in the currency of the country from which the merchandise was imported, though the over-valuation thus created will not seriously affect the grand total, since the imports from Europe where most of the depreciation in currency occurs form less than 20 per cent of the total imports of the current year.

BRITISH CHAMBER IN NEW YORK

The British Chamber of Commerce in the United States, with offices at 295 Broadway, New York, has been incorporated to facilitate trading between the United States and Great Britain. The following officers have been elected:

President, Sir Charles Carrick Allom, of White Allom & Co.

Vice-president, A. Walpole Craigie, of Craigie & Co., Ltd.

Secretary and Treasurer, J. H. H. Muirhead.

Board of Directors—William D. Ager, of Harrods, Limited; Richard Airey, Woolworth Bldg., New York; Walter C. Airey, of Dominion Exporters, Ltd.; W. Johnson Fuller of Alfred Herbert, Ltd.; Frank L. Hughes, of Tootal, Broadhurst, Lee & Co., Ltd.; W. M. MacFarlane, of Anderson Textile Mfg. Co., Inc.; Rowland H. Ormsby, of Barber, Williams & Co., Inc.; Joseph Read Patterson, of Arnold Karberg & Co.; Harvey G. Rae, of George Wills & Sons, Ltd.; J. Harold Rose, of S. Smith & Sons, Inc.; Kennard L. Wedgwood, of Josiah Wedgwood & Sons, Ltd.; Ernest F. M. Wye, of Thomas Meadows & Co.

J. H. H. Muirhead, secretary, explained the purposes of the Chamber in detail as follows:

"Many of the leading firms engaged in international business admit that they have felt the want of a British Chamber in New York for many years,—while those new to this trade express their surprise that we have not been in existence before. America and Britain are one in realizing the value of the American Chamber of Commerce in London and the need for a sister institution in New York. The Chamber will undertake to collect and disseminate statistical and other information for trading, commercial, shipping and manufacturing interests, including the publication and distribution among members of a periodical journal or journals; to propose, promote, support or oppose by all lawful means legislative or other measures affecting the aforesaid interests.

"We will undertake by arbitration the settlement of differences and disputes arising out of trading, commercial, shipping or manufacturing questions submitted to its decision, and will furnish to members, in confidence and upon application, but without guarantee, information respecting the standing of firms, individuals and corporations in the United States and in the United Kingdom who are not members of this corporation."

The Senate adopted the conference report on the Edge bill, last week. The bill so amends the Federal Reserve Act that large credit corporations may be formed to finance business undertakings in foreign countries with long credit periods calculated to afford financial and industrial relief for the countries of Europe that have been prostrated by the five years of war.

CHEMICAL INDUSTRIES FOR THE SOUTH

Dr. Arthur D. Little Says Aluminum, Coal and Coal-Tar Products, Rosin, Turpentine, Lumber and Its By-Products, Including Pulp Wood, Should be Developed from the Chemical Side

Dr. Arthur D. Little, in his address before the American Institute of Chemical Engineers, at Savannah, on "The Future of the South is in Chemistry," predicted that the production of aluminum would be a great future industry of the South, with the development of effective methods of extracting the metal from clay, making the immense deposits of kaolin in Virginia, the Carolinas, Georgia, Florida and Alabama, mines of aluminum ore. Every branch of ceramic industry, from bricks, tiles and terra cotta through pottery and porcelain, may eventually be worked out, he said, by the use of Southern clays when chemistry is applied to remove certain mineral impurities, and in the Appalachian region quartz in great quantities awaits the enterprise of the glass maker.

Present methods of utilizing coal, Dr. Little showed, are wasteful in the extreme, since its chemical values are ignored. Bituminous coal, he held, is not a desirable fuel for use in cities and the anthracite supply is reduced to 190 tons per capita. He suggested as a readjustment of the problem that "coal should be burned much nearer to the mine in super-power plants and its energy delivered to great common carrier transmission lines for power linked to hydro-electric developments and operated in co-ordination with them."

"It also means," he said, "huge gas works in which the chemical values of the coal are saved, as ammonia and tar, the coke converted into artificial anthracite, and the gas made available for distribution for light and heat and power over a wide area."

Application of chemical research to the utilization of rosin and turpentine was suggested as a productive field. "The end of the virgin supply of crude turpentine," Dr. Little said, "is already in sight and much nearer than is generally realized. Fortunately for the South and for the world, chemistry has performed the double service of demonstrating that cut-over lands may profitably be cleared and new supplies of rosin turpentine and pine oil extracted from the encumbering stumps of long past lumbering."

Wastes are colossal, he pointed out, in the lumber industry, and he suggested that the South's prosperity would be dependent on the utilization of these wastes. "A ton of straw for example," he said, "will yield 1,100 feet of gas or 800 pounds of high-grade paper. Great stores of ethyl alcohol rosin turpentine, gas and tar and many thousand tons of paper, container and building boards, fruit wrappers, bags and twine are potentially present in the wood waste burned in the South each day."

Dr. Little predicted that the expansion of the paper industry for the next decade must be in the South, "which offers the cheapest pulp wood on the continent outside of Alaska and in close association thereto, the raw materials required for its reduction."

"The South cannot afford indefinitely," he said, "to repurchase its own cotton as dress goods, its cotton oil as lard substitute, its bauxite as aluminum kitchen ware, its pig iron as stoves, its clays in paper or French china. This means that the time has come when for the South chemistry begins at home."

The C. A. Hill Chemical Co. has begun the operation of its magnesite mines near Porterville, Cal. The American Magnesite Company plans to begin work shortly at its mines and mill.

Trade Notes and Personals

W. C. Bradley of Columbus, Ga., has been elected chairman of the executive committee of the Coca Cola Company.

The Madison Kipp Lubricating Co., Madison, Wis., has awarded a contract for an addition to its plant, estimated to cost about \$200,000.

The Department of Commerce announces that 1,250,000,000 pounds of sugar valued at \$97,000,000 were exported from the United States during the first ten months of 1919.

The N. Sakiyama Company, general importers and exporters of Yokohama, Osaka and Tokyo, has opened offices in the Postal Telegraph Building, San Francisco, under the management of T. Yamasaki.

The annual meeting of the American Metric Association, will be held in St. Louis, Dec. 29 and 30. A special train will take delegates from New York, stopping at Buffalo for members who are planning to attend.

E. E. Pratt & Co., exporters and importers of New York, have established offices at 268 Market street, San Francisco, and are continuing the business formerly conducted by Charles T. Stork & Co., F. H. Stone is in charge.

California cotton growers find it difficult to secure seed for planting and the acreage next year will be smaller. Last season the cotton crop of the State was valued at \$20,000,000 and large acreages would be planted in the San Joaquin and Sacramento Valleys if seed were available. The boll weevil is causing so much damage in the southern cotton growing states from which seed has been obtained in the past that the State Horticultural Commission has ruled against further importations of seed.

At the November meeting of the Minnesota Section of the American Chemical Society Dr. Guy H. Woollett delivered a paper on Aristol. This product is marketed under several other names such as annidoline and di-iodo-di-thymol. It is described as a pink to buff dusty powder, insoluble in water and alcohol and is used as a substitute for iodoform, etc., as it slowly gives up iodine and is almost odorless. It is prepared by the action of an excess of iodine-potassium iodide solution on a cold alkaline solution of thymol.

T. H. Field, Kentucky representative of the Norwich Pharmacal Company, was killed on the Dixie Highway, a short distance out of Covington, Ky., early in December. He was found unconscious on the road and died while being rushed to the hospital. The skull had been fractured, and whether he was way-laid and murdered or hit by a speeding automobile has not yet been determined. The sympathy of a large circle of warm friends in the pharmaceutical field goes out to the widow and daughter, who reside at Wheaton, Ill., in their sudden and tragic bereavement.

Salesmen from all over New England attended the annual sales convention of Wadsworth, Howland & Co., Inc., paint and oil dealers, held at the main store of the company, in Boston. Arthur P. Felton, president of the corporation, in his opening address said that all previous records of the corporation had been eclipsed by the business of 1919. In the evening the "Bay State Boosters" had their banquet at the Quincy House. The committee of welcome included Arthur P. Felton, president; Charles S. Robbins, vice-president; George H. Kimball, treasurer; Eugene Felton, sales manager and Charles F. Howland, chairman of the board of directors.

U. S. PRODUCTION OF FATS AND OILS

Bureau of the Census Gives Estimates for Three-Month Period Ended Sept. 30—Consumption, Stocks on Hand Sept. 30, and Imports and Exports—Raw Materials Used

(Special to DRUG AND CHEMICAL MARKETS)

Washington, Dec. 23.—The production of fats and oils (exclusive of refined oil and derivatives) during the three-month period ended Sept. 30, 1919, as compiled by the Bureau of the Census, was as follows: Vegetable oils, 305,277,967 pounds; fish oils, 2,814,468 pounds; animal fats, 272,640,585 pounds; and greases, 60,999,418 pounds; a total of 641,732,438 pounds. Of the several kinds of oils and fats covered by the inquiry the greatest production, 187,110,663 pounds, appears for edible lard. Next in order are linseed oil, with 122,528,148 pounds; cottonseed oil, with 90,382,834 pounds; tallow, with 71,556,232 pounds; and coconut oil, with 58,402,600 pounds.

Nearly all of the crude vegetable oils are passed through a refining process, although some virgin oil is expressed. The production of refined oil during the three-month period was as follows: Cottonseed, 94,143,116 pounds; coconut, 86,950,364 pounds; peanut, 60,391,187 pounds; soya bean, 55,148,481 pounds; and corn, 19,846,565 pounds.

The data for the production, consumption, imports and exports, and stocks of fats and oils for the raw materials used in the production of vegetable oils for the three month period appear in the following statements (the last three 000 of each figure are omitted):

Production, Consumption and Stocks of Fats and OilsFor the Quarter Ending
Sept. 30, 1919

Kind	Pounds	Pounds	Pounds
Vegetable Oils			
Cottonseed, crude	90,382	103,009	45,556
Cottonseed, refined	94,143	149,376	89,732
Peanut, virgin and crude ..	2,483	51,860	33,821
Peanut, refined	60,391	63,944	18,102
Coconut or copra, crude ..	58,402	145,007	117,965
Coconut or copra, refined ..	86,950	52,331	39,317
Corn, crude	24,607	24,219	7,797
Corn, refined	19,846	5,701	12,684
Soya-bean, crude .....	.....	81,999	66,588
Soya-bean, refined	55,148	35,985	20,522
Olive, virgin and crude ....	.....	350	5,634
Olive, refined	4	348	4,850
Palm-kernel, crude	110	897	493
Palm-kernel, refined .....	.....	221	121
Rapeseed	481	2,014	8,543
Linseed	122,528	51,924	51,426
Chinese wood or tung .....	.....	9,898	14,351
Castor	6,010	1,595	3,339
Palm .....	.....	6,789	16,567
Chinese vegetable tallow ...	.....	759	1,029
All other	630	2,455	3,906
Fish Oils			
Cod and cod-liver	165	1,400	2,041
Menhaden	1,955	5,494	14,257
Whale	1	4,574	7,464
Herring	44	2,082	5,204
Sperm .....	.....	470	4,642
All other (including marine animal)	647	1,062	5,833
Animal Fats			
Lard, edible	187,110	52,229	53,631
Lard, neutral	11,927	11,046	4,990
Tallow, edible	8,493	6,237	6,033
Tallow, inedible	63,062	66,808	40,280
Neat's-foot oil	2,046	659	2,132

Greases

White	9,759	18,676	5,573
Yellow	9,087	9,641	7,162
Brown	5,514	14,266	9,604
Bone	5,849	2,302	4,009
Tankage	10,303	911	9,135
Garbage or house	12,388	13,380	13,012
Sewer	132	74	26
Curriers'	55	39	227
Wool	2,382	357	1,610
Recovered or degreas	2,965	2,052	1,934
All other	2,560	687	1,456

Derivatives

Acidulated soap stock	11,861	13,702	13,765
Cottonseed foots	22,364	45,062	25,874
Cottonseed foots (distilled) ..	3,958	4,759	7,683
Fatty acids	9,843	13,739	6,029
Fatty acids (distilled)	27,348	16,592	6,083
Glycerin, crude 80% basis ..	21,024	18,215	5,596
Glycerin, dynamite	7,936	7,817	7,055
Glycerin, chemically pure ..	8,744	547	2,252
Grease stearin	3,162	4,518	2,838
Hydrogenated fat and oil ..	22,282	14,527	12,344
Lard oil	2,468	2,795	3,800
Lard stearin	183	178	597
Mutton oil	659	17	152
Oleo oil, edible	28,973	16,984	16,980
Oleo stock	37,344	30,437	6,325
Red oil	8,399	6,190	5,103
Stearic acid	3,921	1,225	2,079
Tallow, beef and oleo stearin, edible	16,138	8,013	7,731
Tallow, beef and oleo stearin, inedible	1,625	13,681	2,769
Tallow oil	4,654	16,190	1,957
Vegetable stearin	8,451	6,975	4,360
Miscellaneous foots	24,812	13,910	17,946
Miscellaneous soap stock ..	9,979	10,700	5,908

In some cases products are prepared by a continuous process and intermediate products which sometimes appear on the market under their own names are not reported. As an instance of this, oleo stock, which is an intermediate product in the production of oleo oil and cleo stearin and which is often sold as oleo stock, has not been reported by some producers of oleo oil and oleo stearin.

Raw Materials Used in Production of Vegetable Oils

Kind	Tons of 2,000 Pounds	
	Consumed	
	July 1 to Sept. 30	On hand Sept. 30
Cottonseed	296,910	232,460
Peanuts (hulled)	2,948	1,738
Peanuts, in the hull	1,947	1,876
Copra	46,527	21,798
Coconuts and skins	694	144
Corn gorms	37,089	1,976
Flaxseed	193,172	38,235
Castor	6,270	4,003
Rapeseed	1,134	50
Mustard seed	783	501
Other	807	1,471

An incendiary bomb, set for the purpose of blowing up 4500 tons of nitrate aboard the Dupont Powder Company's steamer Terrier at San Francisco, Cal., caused a fire that burned throughout the night of Dec. 6. Evidence of an incendiary plot was found at the time the fire was discovered and a yard of burned powder fuse was turned over to the police. The nitrate came from Antofagasta, Chile.

EXPORT EXPRESSIONS STANDARDIZED

A standard meaning of common export expressions was agreed upon at a conference at India House, attended by representatives of the National Foreign Trade Council, National Association of Manufacturers, American Manufacturers' Export Association, American Exporters' and Importers' Association, New York Produce Exchange, the Merchants' Association, the Chamber of Commerce of the United States, the Chamber of Commerce of New York, the Philadelphia Commercial Museum and the Bureau of Foreign and Domestic Commerce.

To end the disagreements between domestic sellers and foreign buyers as to precise obligations implied by the expressions f. o. b. (free on board), f. a. s. (free alongside ship), c. & f. (cost and freight), c. i. f. (cost, insurance and freight) and l. c. l. (less than carload lot), these authoritative trade bodies have worked out official interpretations, which shall be accepted as the standard in dealing with their members.

A motion by O. K. Davis, secretary of the National Foreign Trade Council, that the entire phrase, such as "free on board" instead of the initials "f. o. b." should be used in specifying terms, was adopted.

PRIMOS CHEMICAL CO. ABSORBED

Negotiations which have been under way for some time looking to the purchase of the Primos Chemical Company by the Vanadium Corporation of America are understood to have been practically closed. The chemical company is an important producer of molybdenum, the principal alloy used in the manufacture of high-speed steel.

The Vanadium company, of which Leonard Repfogle is president, will issue about 93,000 shares of new stock to be offered to present shareholders at the rate of one share of new stock for every three now held. It is understood the issue price will be around \$45 a share. The money realized from the sale of this stock will be used to finance the purchase of the Primos company.

DR. WESSON'S PAPER ON COTTON OIL

Dr. David Wesson told the members of the American Institute of Chemical Engineers at Savannah, Ga., in a paper read at the recent convention, about "The Development of the Cotton Oil Industry in the South." He gave a brief and amusing sketch of the early days of the manufacture of cotton oil, the experimental stages through which it passed, and the final achievement. Following his paper, he exhibited a number of lantern slides, some of them statistical, and others illustrating the growth of the cotton plant, the ginning of cotton and the manufacture of by-products and a number of them showing the various plants of the Southern Cotton Oil Company and similar industries.

WILLIAM H. RANKIN DIES IN FLORIDA

William H. Rankin, one of the founders of The Barrett Co., and a manufacturer of tar products, died at Rock Ledge, Fla., last week. He was 76 years old. Mr. Rankin was born in Wilkes-Barre, Pa. He served in the Civil War and afterwards settled at Elizabeth, N. J., and became a manufacturer of tar paper, organizing the William H. Rankin Tar Company. About twenty years ago he retired from active business, but retained a large interest in the company. He was formerly Police Commissioner of Elizabeth and also Fire Commissioner. Mr. Rankin had developed Rock Ledge, Fla., extensively as a winter resort. He owned several hotels in Florida.

A chemical plant for the Menthooze Laboratory, estimated to cost about \$100,000, is under construction at Ft. Dodge, Iowa.

CHINA WOOD OIL IN VARNISH**Maximilian Toch Tells Chemical Engineers the Advantages of Its Use in Place of Linseed—Result of Experiments Which He Made on Buildings Close to Seashore**

During the convention of the American Institute of Chemical Engineers at Savannah, Ga., Maximilian Toch read a paper on "The Use of Rosin in Paint and Varnish" because it showed the changed attitude of science towards the advisability of rosin as a paint material and varnish compound and the recognition of its value in their manufacture by the government and by private contractors who now sanction and encourage a practice which they once prohibited. Dr. Toch said he had never believed in the use of rosin as a varnish or paint material except for the manufacture of resins as driers, because up to within a few years ago no rosin varnish or paint oil containing rosin has been made that had much merit. Up to 1914, he said, there was hardly a paint or varnish specification that did not prohibit the use of rosin, which because of various undesirable characteristics was regarded as totally unfit for paint or varnish purposes. It was discredited on this ground and because its price was so low that it was easily used as an adulterant or cheapening material.

The advent of China wood oil, Dr. Toch, said, had brought about the change which now makes rosin a recognized legitimate material in paint and varnish manufacture and neutralizes the objections it once offered on the score of friability, its high acid quality, its tendency to become soft and sticky in damp weather, to change color, to form resins. China wood oil, Dr. Toch, recalled, was also once condemned because of its unfavorable comparison with linseed oil.

Raw China wood oil, he said, no matter what it is mixed with, dries with an opaque, brittle crystalline film, and solidifies under sufficient heat. After some discussion of the technical process by which this varnish is achieved, Dr. Toch said that in 1915 and 1916 he made several hundred gallons of various colored paints, omitting linseed oil entirely as a vehicle and substituting for it a varnish made from rosin and China wood oil, and these paints he applied to wooden structures on the Atlantic Coast which were from one hundred to five hundred yards distant from low tide and consequently subject to heavy sea fogs. In comparison with these tests he had a number of smaller buildings painted with various mixtures of lead and zinc and linseed oil. His conclusions were that the gloss and hardness of the resulting film, after three years, was as good for the rosin-China wood oil mixtures as for the linseed oil paint, with the advantage to the rosin-China wood oil paint in that it left a better surface for repainting.

Under certain chemical processes rosin, according to Dr. Toch, produces waterproof varnishes which are so far superior to the linseed oil fossil rosin varnishes that the newer specifications of the government not only permit their use but encourage it for such things as railway finishing varnish, flat finish interior wall paint, deck and floor paint and spar varnish for use in aeroplane construction. Nearly all automobiles, he said are now finished with this type of varnish.

The Sterling Products Co., Wheeling, W. Va., manufacturer of proprietary medicines, has increased its capitalization from \$4,000,000 to \$7,500,000. H. F. Behrens is president; A. H. Diebold, secretary-treasurer, and W. E. Weiss, general manager.

The Los Angeles Soap Co., Los Angeles, Cal., is building a distillery, machine shop and boiler plant.

OUTPUT OF QUICKSILVER SMALLER

United States Mines Produced Only 15,125 Flasks During First Three-Quarters of 1919--Total for the Year Not Likely to Exceed 20,000 Flasks

F. L. Ransome, of the United States Geological Survey, Department of the Interior, says producers in the United States reported for the period July 1 to September 30, inclusive, a total output of 5,207 flasks of quicksilver, of 75 pounds net each. It is estimated that three or four small operators in California and two or three in Nevada, from whom no returns have yet been received, may have produced from 10 to 20 flasks, and that it will be sufficiently accurate, pending final figures for the entire year, to consider the total production for the third quarter as 5,225 flasks. This is an increase of 1,285 flasks as compared with the second quarter, or about 32 per cent. The total production in 1918 was 32,883 flasks. As the production for the first three quarters of 1919, has been only 15,125 flasks, if the total for the year is to equal that of 1918, the output for the fourth quarter will have to amount to 17,758 flasks. This is far beyond any reasonable expectation, and the outlook at present indicates that the total production for 1919 will be about 20,000 flasks. Sixteen mines were reported as productive during the third quarter, or the same number as in the second quarter. Of the 5,207 flasks reported, 3,903 flasks were produced in California, 1,209 in Texas, 71 in Nevada, and 24 in Oregon.

Quicksilver reported on hand at the mines or in transit to market at the end of the quarter amounted to 2,185 flasks, as against 1,635 flasks at the end of the second quarter and 2,800 flasks at the end of the first quarter.

The average monthly prices of quicksilver in San Francisco for the first nine months of 1919 as quoted in 'the Mining and Scientific Press were as follows:

January	\$103.75
February	90.00
March	72.80
April	73.12
May	84.80
June	94.40
July	100.00
August	103.00
September	102.60

As compared with the prices in all previous years, except 1874, these prices are extraordinarily high, yet the output for the year does not seem likely to surpass the 20,524 flasks produced in 1912, when the average price was only \$42.05 a flask.

The Federal Trade Commission has cited the Pennsylvania Salt Manufacturing Co., of Philadelphia, in a complaint alleging unfair methods of competition. It is claimed that the company entered into agreements with dealers to maintain resale prices and refused to sell dealers who would not agree to maintain prices fixed by the company.

The Bayer Co., Inc., New York, has been cited by the Federal Trade Commission for alleged unfair methods of competition, in publishing advertisements that their product was the only genuine, unadulterated and safe drug product manufactured and sold as aspirin.

The Upjohn Co., Kalamazoo, Mich., has been cited by the Federal Trade Commission for unfair trade practices in attempting to maintain prices by means of agreements and refusing to sell their pharmaceutical products to dealers who refused to sign the agreement.

ACCUSED OF UNFAIR PRACTICES

(Special to DRUG AND CHEMICAL MARKETS)

Washington, D. C., Dec. 23.—Several complaints have been issued by the Federal Trade Commission against concerns in the drug, chemical and allied industries. The Ohio State Linseed Company and the Union Linseed & Turpentine Company, both of Cleveland, have been charged with unfair methods of competition in the sale of adulterated linseed oil and adulterated turpentine by representing that all linseed oil and turpentine not suitable for medical purposes must, by a ruling of the Ohio State Pure Food and Drug Commission, be labeled "adulterated," whereas the only ruling by the commission was that all "adulterated" products must be so labeled. It is charged in the complaint that the adulterated products sold by the respondents are held out to be equal to strictly pure oil and turpentine for other than medical purposes.

In an order just issued by the commission, William Morhmann, of New York, has been ordered to cease and desist from engaging in certain unfair methods of competition in the sale of chemicals, dyestuffs, textiles, soaps and similar products in interstate commerce. Unfair competition is also charged in complaints issued against B. T. Babbitt, Inc., of New York; the Globe Soap Company, Cincinnati; Fels & Company, Philadelphia, and Lautz Brothers & Company, Buffalo, all engaged in the manufacture and sale of soap, soap powders and other cleansing compounds.

DU PONTS ACCUSED OF BRIBERY

E. I. du Pont de Nemours & Co. have been cited by the Federal Trade Commission to answer a complaint alleging unfair methods in competition and the making of "tying contracts" in interstate commerce. The company, which manufactures various explosives and blasting powder, received forty days in which to make answer and then the case will be tried on its merits.

"The complaint," said the Commission's statement, "alleges that the respondents contracted with various producers of bituminous coal in the Springfield, Ill., district for the sale of blasting powder for a period of five years at a price fixed upon the condition that the coal producers would not use powder manufactured by any competitor of the respondent company."

"Further allegations of the complaint are that the respondent through its agent has adopted the practice of giving gratuities such as liquors, meals and entertainments, to miners employed in mines in which were used blasting powder manufactured by its competitors as an inducement to influence the miners to refuse to use the competitors' powder, and to inaugurate strikes in the mines where competitors' powder was used; that as a result of such influences exercised by respondent's agents, the miners employed in a certain mine using a competitor's powder were induced to go on strike and remain on strike for a period of sixteen days."

William S. Gray & Co., 80 Maiden Lane, New York, will act as agents for the American Magnesia & Covering Co. in the distribution of their products.

Harry W. Saxton, of Thomas H. White & Co., Baltimore, brokers in fertilizer, died last week following an operation. He was 46 years old.

The production and exportation of Chilean nitrates for October, 1919, were as follows in Spanish quintals of 101.41 pounds each: Production for October, 1919, 2,538,468; production for October, 1918, 5,534,339; decrease in production October, 1919, 2,795,871. Exports for October, 1919, 3,740,247; exports for October, 1918, 7,505,686; decrease in exports during October, 1919, 3,765,439.

Financial Notes

The Merrimac Chemical Company has declared a quarterly dividend of \$1.25 per share.

American Druggist Syndicate rights have been admitted to dealings on the New York Stock Exchange.

The Texas Gulf Sulphur Company, Bay City, Tex., has increased its capital stock from \$5,000,000 to \$7,500,000.

The American Zinc L. and S. Co. has declared a quarterly dividend of \$1.50, payable Feb. 2 on stock of record Jan. 23.

The Sherwin Williams Co., of Canada, reports for the year ended Aug. 31, last, earnings of \$990,919, against \$1,162,951 last year, which was the record year. Net was \$350,769, equal to 8¼ per cent on the common. Total surplus of \$2,684,051 represents 70 per cent applicable to the common, which as yet has received no dividend.

It is understood in Wall Street that the Corn Products Refining Co. will show earnings of \$25 a share on the common stock this year after all charges. Earnings in the first three quarters of the current year were at the rate of \$23.25 for the full twelve months. It is generally believed that the company will start dividends on the common stock early next year at the rate of \$6 a share.

QUOTATIONS ON CHEMICAL STOCKS

	Bid	Asked		Bid	Asked
Aetna Expl.	8½	9	H'k Electro.	70	75
Aetna Expl., pf.	67	68	H'k Elec., pf.	65	75
Air Reduction	52	53	Heyden Chem.	5½	6
*Am. Ag. Ch.	92	93	*Int. Agricul.	20	22
*Am. Ag. Ch., pf.	96½	97	*Int. Agricul., pf.	80	81
*Am. Chicle	90	96	*Int. Nickel	21	22
*Am. Chicle, pf.	82	85	*Int. Nickel, pf.	90	93
*Am. Cot. Oil.	46	47	*Int. Salt	65	68
*Am. Cot. Oil, pf.	38	39	K. Solvay	88½	110
*Am. Cyan.	30	33	*Mathieson Alk.	38½	40
*Am. Cyan., pf.	55	60	Merck & Co., pf.	96	100
*Am. Druggists S.	12	12½	Merrimac	92	94
Amer. Glue	40	45	Mulford Co.	55	60
Amer. Glue, pf.	65	70	Mutual Co.	150	..
*Am. Linseed	67	68	*Nat. A. & C.	68½	69
*Am. Linseed, pf.	93	96	*Nt. A. & C., pf.	89	89½
*Am. Malt	47½	48	National Lead	79	80½
Amer. Zinc	16	16½	N. J. Zinc	110	110
Amer. Zinc, pf.	52	56	Niag. A. P.	265	275
Atlas Powder	180	160	Niag. A. P., pf.	96	100
Atlas Powd., pf.	88	91	Parke, Davis & Co.	123	130
*Barrett Co.	121	122	Penn. Salt	78	78½
*Barrett Co., pf.	113	114	Procter & Gamble	676	695
British Am. Chem.	7½	8	Procter & Gam., pf.	101	101½
Butterworth-Jud.	33	35	Rollin Ch.	50	60
By. Prod. Co.	112	117	Rol. Ch. pf.	80	90
Carborundum	135	135½	Royal Baking Po.	135	145
Carborundum, pf.	119½	116	Royal Bak. Po., pf.	92	54
Celanese Co.	40	45	Semet S.	160	175
Celluloid Co.	135	145	Sherwin-Williams	520	540
Celluloid, pf. ....	..	..	Solv. Proc.	100	100
Corn Products	85	85½	Stand. Ch.	90	100
Corn Products, pf.	106½	107	Swan & Finch.	100	115
Davison Chem.	34½	35	*Tenn. C. & Chem.	9½	10
Dow Chem.	175	200	Tex. Gulf, Sul.	15½	15½
Dow Ch., pf.	103	103	Union Carbide	74	75
Du Pont	375	390	Union Sulphur ....	..	..
Du Pont, deb., pf.	92½	93	*Un. Drug	138	142
Du Pont, C. pf.	9	10	*Un. Drug 1st pf.	51½	52
Freepor, Tex., Sul.	37	38	*Un. Dyewood	50	61
Freepor, Tex. Sul., pf.	91	93	*Un. Dyewood, pf.	90	96
*Gen. Chem.	185	200	U. S. Gypsum ....	..	..
*Gen. Chem., pf.	97	100	*U. S. Indus. Alco.	103	103½
Grasselli	170	170	U. S. Indus. Al., pf.	100	105
Grasselli, pf.	99	101	Va.-Car. Chem.	66	67
Hercules, Powder.	220	226	*Va.-Car. Ch., pf.	108	112
Hercules, Powd., pf.	107	110	V. Vivaldoun	22	22½

BONDS

	Bid	Asked
*Am. Agricul. Chem., 1st conv. 5s, 1928.	97	99
*Am. Agricul. Chem., conv. deb. 5s, 1924.	100	101
*Am. Cotton Oil deb. 5s, 1931.	88	89
*Int. Agricul. Corp. 1st Mort. & Col. tr. 5s 1932.	83½	85
*Va. Carolina Chem., 1st Mort. 5s, 1923.	94½	95
*Va. Carolina Chem., conv. deb. 5s, 1924.	102	104

*Listed on New York Stock Exchange

EXPORTS OF DYESTUFFS IN OCTOBER

(Special to DRUG AND CHEMICAL MARKETS)

Washington, D. C., Dec. 23.—Dyes to the value of more than \$1,500,000 were exported during October, according to a report of the Department of Commerce. Statistics kept by the Department divide dyes into three classes, aniline, logwood and all others, the exports by classes being aniline dyes, \$1,037,708; logwood extract, \$93,022; all others, \$453,390. The following table shows the exports of the various classes to the leading countries with which we do business in this line:

Countries	Aniline Dyes	Logwood Extract	All Other
Austria-Hungary .....	.....	.....	\$12,180
Belgium	\$90	\$14,573	18,993
Denmark	1,031	.....	.....
France	4,044	2,310	13,781
Greece	1,575	.....	1,266
Italy	89,738	16,067	16,215
Netherlands	1,190	.....	.....
Norway .....	.....	.....	95
Portugal	1,500	.....	193
Russia in Europe	8,500	.....	.....
Spain	73,913	6,752	8,463
Sweden	3,829	.....	7,543
Turkey in Europe .....	.....	.....	140
England	5,700	30,375	46,754
British Honduras .....	.....	.....	65
Canada	72,744	15,898	139,493
Mexico	58,778	2,502	14,272
Argentina	16,393	.....	15,853
Bolivia	1,932	.....	35
Brazil	97,325	1,235	29,025
Chile	9,520	1,183	8,680
Ecuador	9,992	.....	1,232
Peru	9,887	46	1,030
China	57,051	.....	23,520
British India	77,149	643	46,770
French East Indies	7,944	.....	2,805
Hongkong	41,397	.....	3,235
Japan	364,554	514	29,020

The Virginia-Carolina Chemical Company has declared the regular quarterly dividend of 2 per cent on the preferred stock payable Jan. 15 and the regular quarterly dividend of 1 per cent per share on the common stock, payable Feb. 2.

W. O. Thompson, president of the American Cotton Oil Co., spoke on "Efficiency of Distribution of Foodstuffs," at the dinner of the Association of Manufacturers' Representatives at the Bellevue-Stratford, Philadelphia, recently.

The United Food Products Co. has declared an extra dividend of 1½ per cent, in addition to the regular quarterly dividend of ½ per cent, both payable Jan. 19 to stockholders of record Jan. 2.

The Mathieson Alkali Works, Inc., has declared a quarterly dividend of \$1.75 on the preferred stock, payable Jan. 2 on stock of record Dec. 20.

The Welsbach Co. has declared a semi-annual dividend of \$3.50 on the preferred stock, payable Dec. 31, on stock of record Dec. 20.

H. H. Philbrick has been appointed assistant manager of the Los Angeles, Cal., office of Rogers, Brown & Co., of Seattle.

The Commonwealth Chemical Co., of Hoboken, N. J., has increased its capital from \$400,000 to \$500,000.

Meyer Bros. Drug Co., St. Louis, was robbed of madeira wine valued at \$700, recently.

The Drug and Chemical Market

Current Spot Quotations of Pharmaceuticals, Page 28; Crude Drugs, Pages 30-32; Essential Oils, Page 34

MAKERS REDUCE IODINE PRICES

Sulphur, Cocaine, and Glycerin Higher—Borax, Oxalic Acid, Wood Alcohol, Formaldehyde, and Thymol Scarce—Limited Stocks Restrict Trading to Small Lots

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Antipyrine, 35c lb.	Ipecac Root, Car., 10c lb.
Balsam Peru, 50s lb.	Lycopodium, 25c lb.
Buckthorn Bark, 15c lb.	Poke Berries, 5c lb.
Canary Seed, Mor., 1c lb.	Poppy Seed, Wht. Ind., 2c lb.
Cocaine Hydrochloride, \$1 oz.	Rapeseed, Dom., 1c lb.
Ergot, 25c lb.	Sage, Dalmatian, 1c lb.
Ginger, Jap., 1c lb.	Sandarac Gum, 5c lb.
Glycerin, C.P., 1c lb.	Senega Root, 25c lb.
Dyn. & Crudes, 1c lb.	Silver Nitrate, 2c lb.
Hydrogen Peroxide, U.S.P., bots.	Sulphur, all grades, 25c cwt.
50c gross	Sunflower Seed, S.A., 3/4c lb.
Insect Flowers, Closed, 15c lb.	Thymol, 50c lb.

Declined

*Acid Citric, 3c lb.	Iodides, 15c to 40c lb.
Arnica Flowers, 5c lb.	*Quinine, Java, 5c oz.
Berberis Aquifolium, 1c lb.	Menthol, 50c lb.
Caraway Seed, Afr., 3/4c lb.	Mustard Seed, Bom. Brn., 3/4c lb.
Cloves, Zan., 2c lb.	Calif. Brown, 3/4c lb.
Calver's Root, 1c lb.	Opium, Gran., Powd., 50c lb.
Dandelion, Eng., 1c lb.	Pepper, Black, Sing., 3/4c lb.
Dill Seed, 15c lb.	White, Sing., 3/4c lb.
Hellebore, Wht. Pd., 2c lb.	Phenolphthalein, 10c lb.
Mace, 2c lb.	Wax, Bay, 2c lb.
Iodine, Resubl., 40c lb.	
Iodoform, 40c lb.	

*Second Hands

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acid Salicylic	\$3.53	\$3.53	\$4.48	\$9.93
Calomel	1.68	1.68	1.59	2.00
Camphor, Jap. ref.	3.60	3.60	3.45	4.00
Glycerin, C.P. ....	.24	.23	.21	.60
Menthol	12.75	13.25	12.00	7.00
Opium, Gum	6.75	6.75	7.00	22.50
*Quinine Sulphate	1.05	1.10	1.25	1.00
Cantharides, Russa	4.00	4.00	3.75	4.00
Ergot, Spanish	5.00	4.75	4.00	1.05
Buchu, Short	2.45	2.45	2.25	2.55
Ipecac, Cartagena	3.30	3.30	3.00	4.25
Rhubarb, H. D.	1.75	None	1.85	.70
Cloves, Zanzibar .....	.51	.53	.55	.47
*Second Hands				

The expected tendency of business to slow down with the arrival of the holiday period has failed to materialize here as far as the chemical and drug markets are concerned. Active inquiries and brisk demand continuing through the early part of the present week preclude the idea that trading will turn dull until after the first of the year. Buying is still of a conservative nature as far as quantities go, but the number of consumers in the market makes trading brisk. As the year draws to an end, indications point to a considerably larger gross business among the drugs and chemicals during 1919 than last year, more particularly the rate at which the present month has outstripped December, 1918. Had it not been for the generally depleted stocks which have restricted both buyers and sellers for some time past, there is little doubt that the volume of trade would have been considerably greater.

The principal price revisions of the past week include a sharp cut in iodine and the iodides by manufacturers, an advance in the quotations for sulphur and cocaine and another jump in the price of glycerin. The market for menthol shows a tendency to weaken. Second hand quinine is easier. Thymol is very scarce and

again higher. Manufacturers have advanced hydrogen peroxide in small bottles. Lycopodium is in very light supply and has advanced. Borax, oxalic acid, wood alcohol, hexamethylene, formaldehyde, buckthorn bark, insect powder, sage and senega continue very scarce. Ergot is higher. Peru balsam has advanced again sharply.

Fine Chemicals

Acid, Citric—To meet the manufacturers' figure resulting from the recent cut in price, second hands here have reduced their quotations on citric acid, and 85c@86c a pound can now be done. Makers still quote 87c for crystals and 88c for powder without change. The market is easy, owing principally to competition.

Acid, Oxalic—Supplies of this item are scarce, and the price is strong at 32c@35c a pound as to seller, grade and quantity.

Antipyrine—Somewhat of a reduction of spot supplies as a result of renewed buying has stiffened the price, and holders now quote \$5.60 and up to \$5.75 a pound for bulk goods.

Alcohol—Wood alcohol is extremely scarce and reflects in the small supplies of formaldehyde and hexamethylene. Distillers quote \$1.42@1.43 for the 95 p. c. and \$1.45@1.46 per gallon for the 97. These figures, however, are practically nominal, and outside stocks are only obtainable in limited lots at the premium figures of \$1.55@1.60.

Camphor—There has been little change, with prices firm at \$3.60@3.65 for Jap refined on spot. American refiners hold to \$3.30 a pound for January and February delivery and are making small deliveries at present only to regular customers.

Cocaine—Manufacturers have advanced their figures for the hydrochloride a dollar per ounce, owing to the scarcity and increased cost of coca leaves. Of the latter, 263 bales arrived this week but went directly into consumption. For the salt, \$10.50 per ounce is the price for small crystals, while large crystals, granular and powdered are quoted at \$10.75.

Glycerin—Glycerin is in a very strong position at present. Refiners have again advanced prices for both C. P. and dynamite this week. Sales of the former are reported to have been made at 24c a pound. Second hands will still do 23c. Cans are named at 25c@26c, the latter figure favored. Dynamite is available at 23c@23 1/2c and very active. Soap lye crude is quoted at 15 1/2c@16c and saponifications at 16 1/2c@16 3/4c a pound.

Hydrogen Peroxide—Manufacturers of small sized bottles of hydrogen peroxide have announced an advance in their prices, owing to increased cost of production. For the 4-ounce size, \$7.50 per gross for ten and \$7.75 for less is named. The 8-ounce bottles are quoted at \$11.25@11.50 per gross on the same basis, the 12-ounce at \$16.25@16.50 and the 16-ounce at \$19.25@19.50 per gross.

Iodine—Following a reduction in the cost of crude iodine, American manufacturers have announced lower prices for resublimed iodine, iodides and allied preparations. For the resublimed crystals, \$4.10 a pound for five-pound lots is named, while iodoform is quoted at \$4.85 for powder and \$5.35 for crystals. Potassium

iodide is lower at \$3.35 a pound for bulk goods in fifty-pound lots, sodium iodide at \$3.65 in 25-pound quantities and ammonium iodide at \$4.65. Others are proportionately lower.

Lycopodium—There continues a scarcity of lycopodium on spot with prices generally higher. The best and only figure heard for U. S. P. goods is \$2.50 a pound. It is understood that a good sized lot has been held up at the Customs House, owing to alleged adulteration.

Menthol—The market for menthol shows an easier tendency this week and, although it is far from weak, holders are uneasy on somewhat of a bearish communication from Japan. Cases can be had at \$12.50 a pound, it is reported, with \$12.75 usually asked. Buyers are practically out of the market, and nothing but a small odd-lot business is passing. An importation was noted last week from Hamburg. Unless something unlooked for happens, it seems to be the general opinion that menthol has hit the peak in the present rise, and lower prices will be seen in the future.

Quinine—The market continues quiet and easy with a routine business passing. Good lots of Java sulphate are available on the market here at \$1.05 per ounce but do not seem to be moving very rapidly. This week 75 cases were reported in at this port from London. Manufacturers are still unable to offer outside of regular trade and to them only in restricted quantities.

Sulphur—An advance of 25c per hundred has been noted for all grades of sulphur, owing to the lively demand and advanced producing costs. Quotations name \$3.20@3.50 per hundred for roll sulphur as to quantity, and \$3.35@3.75 for 100 p. c. pure flour, from car lots to a single barrel. Flowers, 100 p. c. pure, are quoted at \$3.55@3.95 same basis.

Thymol—The scarcity on the spot has driven the price still higher. The lowest figure heard here is \$11.50 a pound, with sellers asking all the way up to \$12.50. It is not expected that the \$11.50 figure will last a great deal longer.

Crude Drugs

Arnica Flowers—Following a marked improvement in the supplies, offerings are heard at lower figures. Sellers are quoting 35c@40c a pound on spot.

Balsam Peru—There is still an acute scarcity of Peru balsam, and holders of the small remaining supplies have again jumped the price sharply upward. The best figure quoted is \$5.00, with some asking higher than this.

Buckthorn—A sale of a small lot was noted this week at 75c a pound. There is no more available on spot that is known, and the price is nominal.

Cloves—Further concessions have been made in quotations on Zanzibar cloves this week. Down to 50c is openly quoted, and this can very probably be shaded. The general tone is easy.

Ergot—There is very little ergot obtainable here, and such lots as are being sold are bringing \$4.75@5.00 a pound, with the probability that the latter figure will be inside before long.

Hellebore—Powdered white hellebore root is available in better supply, and the price has been reduced to 21c@22c a pound by sellers.

Insect Flowers—Closed insect flowers are sharply higher, as millers have taken them up in the production of powder. Quotations now name 75c per pound.

Ipecac Root—Quotations for Cartagena ipecac are somewhat firmer on the small supplies available here. The price is now the same as the Rio at \$3.20@3.25 a pound, while for powdered \$3.40@3.50 is ruling.

Mustard Seed—Bombay brown is slightly lower at 14½c@15c a pound. California brown seed is down to 16c@16½c. Others are steady and unchanged.

Opium—The gum is still easy at \$6.75 for cases. A reduction has been made in the prices of granular and powdered, bringing them down to \$8.50 a pound for both.

Poke Berries—Recent arrivals are being held at sharply higher prices. Holders are quoting 22c a pound for spot goods.

Sage—There is some Spanish sage available at 15c@16c a pound. A lot of Dalmatian sage is being offered slightly higher at 28c@29c. There is no Greek on the spot, but shipments are en route.

Senega Root—The scarcity of senega root shows no improvement. The lowest price heard on the spot is \$2.25 a pound, but this will not last very long, as most sellers demand \$2.50. From the country one shipper offers small lots at \$2.50. The price is expected to go higher, as available supplies are taken up and the scarcity becomes acute.

Drug Trade News Notes

The steamer Verentia arrived from London with 1,400 flasks of quicksilver.

Vanilla beans valued at \$163,007 were imported at New York during the month of October.

The Motturas Company of Duluth, Minn., has changed its name to Universal Remedies Co., and will increase its production of liniments and other products.

Mexican customhouse authorities are watching for 14 cases of opium, shipped from the United States to Cuba. The shipment is reported to have left Cuba for Mexico and it is supposed an attempt will be made to smuggle it in. The Cuban authorities have no knowledge of the fact that the shipment has left that country.

Meyer Brothers Drug Co., St. Louis, held its fourth annual sales convention, last week. In the programme appeared the names of employees who are members of the Nestor Club and have been with the company more than 25 years. The chief nestor, G. J. Meyer, has a record of 56 years; Frank Amlar, 50 years; and six other employees more than 40 years. There are 39 members.

Owing to the strained relations between Mexico and the United States, due to the Jenkins case, the price of green vanilla beans has dropped. The price is so low that the natives are not selling. The curers are quoting for the green beans \$35 Mexican currency, per 1000 beans. This is for the new crop. All of the 1918-1919 crop has been disposed of. The 1920 crop will not be ready until April to June, 1920. The price of green beans will advance as soon as the Jenkins case is settled and we go back to "Watchful Waiting."

John Clarke & Co., in their weekly review of the market for seeds and herbs, say: "The trading has covered a fairly wide range but the volume has been restricted. All the evidence indicates a wide distribution of the articles used during the holiday season. The usual pre-inventory readjustment of accounts has released for sale a number of miscellaneous grades, but speaking as a whole the market can be described as generally steady and prices unchanged, with limited end-of-the-year closing out of balances, which process is less evident than in former years. Mustards are fairly steady, with moderate distribution which is likely to expand very broadly after the holidays."

The Essential Oil Market

Current Spot Quotations of Essential Oils and Aromatic Chemicals, Page 34

ESSENTIAL OILS CONTINUE ACTIVE

Reduction of Stocks and Numerous Enquiries Serve to Keep Prices Firm—Manufacturers Advance a Few Products—Oil of Sweet Orange and Bois de Rose Higher

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Oil Bois de Rose, 51 lb.	Bromostyrol, 50c lb.
Oil Citronella, Java, 5c lb.	Eugenol, 50c lb.
Oil Erigeron, 25c lb.	Linalol Acetate, 01 lb.
Oil Orange, Bitter, 25c lb.	Phenylacetaldehyde, 10 lb.
Sweet, Sicilian, 50c lb.	Thymol, 50c lb.
Oil Peppermint, 25c lb.	Balsam Peru, 50c lb.

Declined

Oil Caraway, 15c lb.	Oil Limes, Expressed, 25c lb.
Oil Juniper Berries, 50c lb.	Menthol, 50c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Oil Bergamot	\$3.00	\$5.00	\$4.60	\$7.58
Oil Citronella, Ceylon	.65	.65	.53	.51
Oil Cloves	3.90	3.90	3.50	3.25
Oil Lavender Flowers	10.25	10.25	9.25	6.00
Oil Lemon	1.40	1.40	1.20	1.55
Oil Peppermint	8.00	8.00	7.75	5.30
Oil Sandalwood E. I.	10.50	10.50	10.50	13.55
Oil Sassafras, Artif.	.85	.85	.75	.56
Benzaldehyde, U.S.P.	1.50	1.50	1.25	5.60
Coumarin	8.25	8.25	8.00	21.00
Eucalyptol	1.50	1.50	1.40	1.25
Methyl Salicylate	.75	.75	.60	1.00
Vanillin	1.00	1.00	.77	.93
Thymol	11.50	11.00	7.25	13.50
Menthol	12.75	13.25	9.75	7.00

The arrival of the holiday period has not brought with it the usual slowing down of business. Consumer inquiry and buying, although continuing for the greater part in holding to conservative orders, was active right up until the close. The chief drawback is still the general shortage of stocks. Leading essential oil houses report that they are receiving orders in large numbers, owing undoubtedly to the small, oft-repeated purchases of a hand-to-mouth variety which are keeping consumers in the market practically all the time. Prices as a whole retain all their former strength, the combined pressure of reduced supplies and active buying assuring an upward tendency for some time to come.

There have been very few actual price revisions during the past week. Sicilian oil of sweet orange is higher. The bitter orange oil has also moved up. The inside seller of bois de rose has advanced his figure sharply. Oil erigeron is firmer. Thymol is very scarce and has advanced. Manufacturers name higher figures for bromostyrol, eugenol, linalol acetate and phenylacetaldehyde. Caraway and expressed oil of limes are lower. Menthol has weakened somewhat.

Essential Oils

Oil Anise—Brokers here are offering to obtain goods at \$1.50 a pound. Inside among the essential oil houses is \$1.75, while up to \$1.70 and \$1.75 are being asked. Supplies on the spot show some improvement, and the product has somewhat of an easier tendency although not sufficient to change the price. Demand is reported good.

Oil Bay—This week 28 cases came in at New York from St. Lucia. However, supplies on the spot remain small, and the price holds stiffly at \$5.00 a pound and up, some holders naming \$5.25 for their goods. Bay

rum is very plentiful here with an active consuming demand. From St. Thomas, 30 barrels and 63 cases arrived this week. The price is steady at \$3.20 per gallon.

Oil Bergamot—Goods are obtainable on this market down to \$4.75 a pound, although leading dealers name \$5.00 as their inside figure and in some cases as high as \$5.25. Heavy importations have been noted this week. Messina continues to name futures at a stiff advance. Demand is routine.

Oil Bois de Rose—The seller at \$9.00 a pound here has jumped the price for oil bois de rose up to \$10.50. There is very little to be had at any price on the spot. Most of the small lots which are being taken up by consumers are passing at a \$10.00 figure.

Oil Caraway—On the weak position which the seed has held for some time and the marked increase in supplies, the price of the oil shows a slightly easier tendency. Spot goods are available down to \$5.85 a pound, with most sellers asking \$6.00.

Oil Cassia—Technical oil of cassia is obtainable down as low as \$2.25 a pound. Essential oil houses quote \$2.40 a pound as their lowest price for the technical and maintain that the cheaper oil is low in cinnamic aldehyde. For lead free oil, \$2.45 a pound is the best figure heard, with some asking above the \$2.50 mark for their goods. U. S. P. redistilled is available at \$2.85@2.95 a pound.

Oil Cedar—There is still an acute scarcity of the oil of cedar wood and little is obtainable at the present level of prices, 30c@32c a pound. Cedar leaf oil continues in small supply with demand light. The price is quiet but firm at \$2.40@2.50 a pound.

Oil Cinnamon—There is practically nothing to be had. Most dealers are cleaned out of stock. Quotations are nominal at \$28.00 per pound for the heavy Ceylon oil.

Oil Citronella—An active demand continues for oil of citronella, and supplies on the spot are small. The price of the Ceylon oil is very firm at 65c a pound and up for drums as to quantity. One holder has advanced the price of Java citronella to 95c a pound inside and \$1.00 for smaller lots.

Oil Cloves—A further break in the price of Zanzibar cloves has been noted this week, undoubtedly a reflection of the recent heavy importation of the spice at this port. It is understood that 50c a pound can be shaded. The dealers in oil of cloves, however, show no tendency to reduce their prices as yet and quote \$3.90 a pound firm. Brokers are naming \$3.60 as the figure at which they can obtain the oil. Less than tin lots are quoted at \$3.95@4.00 a pound. It is understood that the report of the clove shortage in primary markets has been considerably exaggerated.

Oil Coriander—One house reports that they have limited quantities of oil of coriander available at \$58.00 per pound. It is very scarce, however, and little or nothing is obtainable around the market.

Oil Cubebs—The oil is in small supply as are the berries, and costs are somewhat higher. For the U. S. P. oil, the price is steady and unchanged at last week's level, \$9.00 inside up to \$9.75 a pound.

Oil Erigeron—One house has advanced the price of erigeron oil apparently on a reduction in the supply. They now quote \$7.25 a pound as their lowest figure, naming up to \$7.50 for jobbing lots.

Oil Eucalyptus—Supplies continue small, and the price is firm at the recent advance. The best quotation here seems to be \$1.00 a pound for genuine Australian oil.

Oil Juniper Berries—There is still a wide divergence among prices quoted in this market for oil of juniper berries. In one or two quarters, \$6.50 a pound can be shaded, while up to \$8.00 a pound is still maintained as the price by others. A marked improvement in supplies has taken place due to recent imports, and the price is notably easier. For double rectified oil, from \$7.50 up to \$10.00 is named, according to seller.

Oil Lavender—Supplies are still very limited and little is coming forward from abroad. Sellers here who have goods are quoting from \$10.00 up to \$11.00 a pound for U. S. P. oil. Spike oil continues scarce at \$2.00 and up per pound.

Oil Lemon—This week 132 cases have come in from Messina. The price holds steady and firm at \$1.35@ \$1.50 a pound, according to brand and quantity. The oil is in good supply here, but producers abroad are intent upon a higher price for the future.

Oil Limes—There is very little demand for expressed oil of limes, and holders have been unable to move goods at the old figures, so have reduced their quotations somewhat. For spot goods, \$3.50 a pound can now be done. Distilled oil is quiet and steady without change at \$1.00@ \$1.10 a pound.

Oil Orange—Further sharp advances have been scored in Sicilian oil of sweet orange and in the bitter oil this week. For the former, \$4.75 a pound is the best figure heard in this market, with many asking up to \$5.00 and \$5.25 for their goods. Bitter oil is strong at \$3.75 a pound inside and up to \$4.25 as to seller. West Indian sweet oil is firm but unchanged at \$3.75@ \$3.80.

Oil Peppermint—The leading dealer in oil of peppermint here has advanced the prices for both natural and U. S. P. on spot. They name \$8.25@ \$8.50 a pound for the former and \$8.75@ \$8.90 for the redistilled. However, \$8.00 and \$8.50 respectively can still be done, although possibly not for long. There is no buying interest being displayed here, and purchases, except in a small jobbing way, are practically nil. There is an offer on the market here by a large consumer of several thousand pounds of standard U. S. P. oil which is available at about \$8.20 a pound.

Aromatic Chemicals

Bromostyrol—This item has been marked higher by one house. The range of quotations now covers \$11.50 @ \$12.00 a pound.

Eugenol—A higher price is named here for eugenol on the generally higher cost of the raw materials. Quotations name \$5.50@ \$6.50 a pound as to seller.

Heliotropin—The inside figure seems to be \$4.25 a pound now with no more \$4.00 goods available. Up to \$4.50 is asked.

Linalol Acetate—The price has been advanced in some quarters, but there is a wide variance in quotations. From \$13.50 up to \$15.00 a pound is the range of prices here.

Menthol—There is little or no buying. The price is easier with reports of case lots having gone through as low as \$12.50 a pound duty paid during the week. Quotations generally name \$12.75 at this time. In spite of the high price in London as per recent report, 25 cases have just arrived at New York from that place. The market here has developed an unquestionable weakness since last report.

Phenylacetaldehyde—One maker has jumped the price to \$50.00@ \$55.00 a pound.

Thymol—Thymol is very scarce on the spot, and the price has been advanced again. It is impossible to beat \$11.50, and \$12.00 will probably be best within a few days.

CHAS. E. WEBB DIES SUDDENLY

(Special to Drug and Chemical Markets)

Baltimore, Dec. 23.—Charles E. Webb, for nearly a generation a leader in the business and financial life of Baltimore and a member of A. L. Webb & Sons, Inc., dealers in drugs, alcohol and cologne spirits, with offices in the Maryland Trust Building, died suddenly of heart failure Saturday evening in a chair at the Maryland Club, only two months after the demise of his brother, Oscar E. Webb, who passed away on Oct. 17 after a lingering illness.

Mr. Webb had been talking with a group of friends and showed no signs of feeling ill before he was stricken.

Mr. Webb was born in Baltimore on March 26, 1856, and was a son of the late Albert Lee Webb. He first entered business with his father in naval supplies, linseed and castor oils. On his father's death he continued the name of the firm, also organizing, with his brothers, the corporation of A. L. Webb & Sons, Inc., Mr. Webb becoming the local representative of the United States Industrial Alcohol Company. He also held an interest in Armstrong, Cator & Co., a wholesale millinery concern, of which his brother-in-law, Franklin P. Cator, is now the head, and was identified with various financial institutions. His wife and three daughters survive him.

MENTHOL HIGHER IN PRIMARY MARKET

(Special Correspondence to Drug & Chemical Markets)

Tokyo, Nov. 27.—The menthol trade which has been inactive, with buyers abroad waiting for a decline, is now recovering with great strength and buoyancy. Menthol canes which have been quoted at yen 24 per kin for a few weeks past are now yen 40 per kin. The Germans who were the largest buyers of peppermint oil before the war, have just started inquiries for peppermint oil. London has bought a large parcel of menthol canes and peppermint oil, this week. Peppermint oil which was obtainable at yen 6 per kin last week is now quoted at yen 10. Canes are expected by holders here to be quoted at yen 50 soon.

The Victory Manufacturing Co., Lake Charles, La., recently incorporated with a capital of \$10,000, is having plans prepared for a plant for the manufacture of soaps and soap products. Charles A. Toce is president and general manager; D. E. LeBleu, vice-president and purchasing agent.

Fritzsch Bros., Inc., New York, essential oils, have sent a card of greetings for 1920 to the trade "Extending our best wishes for a most prosperous and happy New Year."

Schuyler L. Parsons, son of the late senior member of the firm of Parsons & Petit, 63 Beaver Street, New York, will be admitted to partnership in that firm on Jan. 1.

Antonio B. Caragol, president of Manuel Caragol & Son, New York, has returned from a four-months trip to Spain.

Robert Badcock, of W. & S. Job & Co., New York, has returned from a trip to New Brunswick, Canada.

The Heavy Chemical Market

Current Spot Quotations of Heavy Chemicals, Pages 34 and 36

SULPHURIC ACID PRICES ADVANCED

**Bichromate of Soda Higher—All Potash Salts Scarce
—Caustic Soda Very Firm—Japanese Buyers Have
Cleaned the New York Market of Ammonium
Phosphate**

PRICE CHANGES IN NEW YORK

(Stocks in First Hands)

Advanced

Ammonia Alum, $\frac{1}{4}$ c lb. Barium Chloride, Imp. & Dom.
Anhydrous, 3c lb. \$5 a ton
Potassium Carb., U.S.P., 5c lb. Sulphuric Acid, 66 deg., \$2 a ton

Declined

Potassium Bichromate, 2c lb. Sodium Bichromate, 7c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Acetic Acid, Glacial.....lb.	\$1.24	\$1.24	\$1.24	\$1.19
Sulphuric Acid, 66 deg.....ton	22.00	20.00	18.00	28.00
Bleaching Powder.....100 lbs.	2.75	2.50	2.25	2.75
Copper Sulphate.....100 lbs.	8.00	8.25	8.25	9.50
Potash, Caustic.....lb.	.30	.30	.28	.74
Saltpeter, gran.....lb.	.13	.13	.13	.27
Soda Ash, 58 p.c.....100 lbs.	2.00	2.00	2.00	2.50
Caustic Soda, 76 p.c.....100 lbs.	4.20	3.61	3.30	4.30
Potassium Bichromate.....lb.	.30	.32	.26	.45

Heavy buying on the part of Japanese consumers of ammonium phosphate and ammonium sulphate has absorbed supplies, especially of the high content ammonium product. Buyers are in the market for ton-lots for delivery up to December, 1920. All ammonium products are stronger. Aqua ammonia has been under heavy inquiry for contract. Caustic soda is in good demand, but sales are greatly curtailed because of the sold-up position of manufacturers. Prices are nominal and continue to advance. Japan and England are in the market for lots extending over a portion of 1920. The domestic requirements are larger, and a very heavy contract business is reported. Bleaching powder is extremely scarce. Alums have advanced. Anhydrous ammonia and ammonium carbonate are higher. White granular ammonium chloride is very firm and is in limited quantities. Barium chloride is higher. Copper sulphate is firmer, owing to heavy buying by large consumers.

Sulphuric acid is higher, especially the 66-degree, which has been under heavy spot and contract inquiry for some time. Muriatic is easier.

Acetic Acid—Buying continues in good volume for domestic consumption, and fair quantities are moving into foreign channels. The supply is better. Contracts are being made, but producers are not inclined to quote far into the future, except on a sliding scale contract. Glacial in barrels is held at $12\frac{1}{2}$ c@ $12\frac{3}{4}$ c, barrels inclusive. Pure is held at 9c and the commercial at 8c. The other percentages are based on the price of the 28 p. c., which is quoted at $3\frac{1}{2}$ c@ $3\frac{3}{4}$ c per pound. Containers are included in quotations.

Acid, Muriatic—In spite of heavy buying, the supply is somewhat easier. Tanks of the 20-degree are quoted at \$1.45 per hundred in large quantities. Carboys in carload lots vary in price from \$1.65@ $\$1.75$ per hundred. The supply is adequate to take care of requirements.

Acid, Nitric—The demand is larger, and prices are firmer. The 42-degree in carboys is held at $7\frac{1}{2}$ c; the 40-degree at $6\frac{3}{4}$ c; the 38-degree at $6\frac{1}{4}$ c, and the 36-degree at 5c.

Acid, Sulphuric—Owing to the acute shortage of 66-degree acid, together with the heavy demand for both export and domestic consumption, holders have advanced figures on contract to \$22 a ton in tank cars, sellers' works. This figure is mostly on new business. Second hands are naming from \$23@ $\$25$ a ton for spot or near-by delivery. Oleum continues under steady inquiry as well as the 60-degree, which is held at \$16 a ton.

Alums—Quotations are higher, with offerings greatly curtailed. The majority of manufacturers are sold up, and most of the spot goods are confined to small lots in second hands. Powdered ammonium is in very strong request at $4\frac{1}{2}$ c to $6\frac{1}{2}$ c. Lump is strong at 4 c@ $4\frac{1}{4}$ c, and ground at $4\frac{1}{4}$ c@ $4\frac{1}{2}$ c per pound. Potash lump is slightly firmer at 8c. Certain holders are inclined to shade these prices.

Aluminum Sulphate—Both the commercial and the iron free are held at \$1.75@ $\$2.75$. Supplies are limited, and sellers are quoting firmly. The demand is steady.

Ammonia, Anhydrous—In sympathy with all ammonium products, prices have advanced 3c per pound. The inquiry is steady.

Ammonium Water—Supplies are still very stringent, and a heavy inquiry is reported. The spot market is tied up, and in quarters no material is offered for next year. Twenty-six degree in carboys is held at $10\frac{3}{4}$ c and in carlots at $8\frac{3}{4}$ c. The other degrees are based on these levels.

Ammonium Phosphate—Japanese consumers have practically stripped the domestic market of supplies for 1920, especially for the 20-20 material. Producers are expanding their plants, but in all probability the market will continue tight during the year. Small quantities of the 13-48 basis are available as well as ton lots of the superphosphate, which is held at about \$18 a ton in bulk f. o. b., Baltimore.

Ammonium Muriate—White granular continues scarce and very firm at 15c per pound. Grey is $12\frac{1}{2}$ c, and offers are confined to one or two odd lots. Lump is held at 24 c@ 26 c among second hands, with figures slightly higher among certain first sources.

Barium Chloride—Heavy demands and lack of stocks on both the imported and domestic have caused higher prices. From \$95@ $\$105$ is now quoted.

Bleaching Powder—Production is sold up on futures, and the majority of producers are not quoting. The price is $\$2.50$ @ $\$2.75$, sellers' works. The export price for January-February is close to \$3.35 f. a. s. this port.

Copper Sulphate—Owing to the stronger position of the copper market, buyers were very active, until within three or four days. Producers bought the metal when the price was low and increased their production of the sulphate. Most of the sales are for domestic consumption, but small shipments are destined for South America. Europe is practically out of the American market, being able to do much better in England, because of the exchange situation. Manufacturers are holding the large crystals at $8\frac{1}{4}$ c@ $8\frac{1}{2}$ c. Second hands name lower prices, especially on one or two odd lots shipped from the West for export, but which are to be sold in the local market.

Nickel Oxide—Heavy buying and the sold-up condition of the majority of producers have caused holders

to name higher figures. The single salt is now held at 15c@16c and the double at 13c@14c. The demand continues very heavy.

Potash, Caustic—Odd lots are in the market, but buyers of ton lots for prompt delivery are experiencing considerable difficulty in locating supplies. Quotations are 28c@32c per pound.

Potassium Bichromate—Following the settlement of the coal strike, the price of bichromate is slightly easier, although spot goods are limited; 30c is named for spot or near-by delivery, as well as February. The demand is fair.

Potassium Carbonate—U. S. P. material is higher, with sales reported at 70c per pound. The material is scarce; 80-85 p. c. is held at 24c; 85-90 p. c. at 28c; and 90-95 p. c. at 34c. The demand is heavy. The 96-98 p. c. material is off the market.

Potassium Permanganate—U. S. P. material is extremely scarce, and buyers are having difficulty in placing orders for export at 65c, which is a nominal quotation.

Potassium Prussiate—Yellow is firmer, being held at 36c@38c per pound. Imported stocks to arrive have been named at 33c per pound. The demand is strong with spot goods limited. Red is unchanged at 95c@ \$1.00 per pound.

Soda Caustic—Practically the only offerings in the market are odd lots, which are held at \$4.25 per hundred pounds, immediate shipment from works. The market is very tight, with production tied up until late spring. The domestic price is \$3.30 per hundred pounds, basis 60 per cent, sellers' works.

Soda Ash—Supplies for export are tighter, and the market is firm at \$1.90, less five per cent f. a. s. for barrel lots. For domestic shipment the price is \$1.62½c @ \$1.67, f. o. b. works.

Sodium Bichromate—The demand has eased up considerably, and prices have declined to 22c for prompt delivery from works. The prices for January, February and March delivery is 20c; and 15c is named for delivery over the rest of the year. Speculation has died out among second hands, who anticipate further declines.

Sodium Prussiate—Stocks are light and are being held at 24c@25c per pound. The demand is fairly active.

CAUSTIC SODA EXPORTS

(Special to DRUG AND CHEMICAL MARKETS)

Washington, D. C., Dec. 23.—Exports of caustic soda during October were:

Countries	Pounds	
Austria-Hungary	336,000	\$10,695
Norway	44,807	13,442
Roumania	230,720	9,620
Spain	58,370	2,567
Sweden	42,840	2,839
Canada	371,511	13,083
Mexico	459,206	17,184
Cuba	755,323	28,371
Argentina	864,109	30,883
Brazil	1,648,292	71,188
Chile	208,503	6,689
China	286,773	10,562
Dutch East Indies	302,200	9,475
Hongkong	67,500	2,228
Japan	5,930,027	225,863
Philippine Islands	170,790	5,018

Industrial Chemical Notes

The Southern Acid and Sulphur Co. is building a refinery at Little Rock, Ark.

The United Chemical Co., has completed arrangements for alterations and improvements in its plant at Kansas City, Mo.

The Union Chemical Glassware Co. has bought the six-story apartment building, 507 and 509 West 169th Street, New York.

The Johnstown Chemical Co., Johnstown, Pa., is having plans prepared for plant and office building, estimated to cost \$125,000.

Over 7,000 tons of nitrate of soda were landed at Baltimore, Dec. 15, by the steamer Minnequa, from Taltal, for the Clarence Cottman Co.

The Pied Piper Chemical Co., Pittsburgh, recently incorporated, will manufacture chemicals. H. G. Welsh is the principal incorporator.

The P. M. Frank Disinfecting Co. has purchased the building at 492 and 494 Broome street, New York, which will be altered for use as a factory.

Joseph Kauffman, of Brooklyn, is president and Milton Dammann, of New York, secretary, of a soap corporation organized at Richmond, Va., with capital of \$1,000,000.

The Centennial Chemical Co., Wilmington, Del., has filed notice with the Secretary of State of an increase in its capital from \$100,000 to \$150,000.

The General Chemical Co., which recently acquired property on Wharton Street, Pittsburgh, has filed plans for a brick structure to cost about \$42,000.

The American Institute of Chemical Engineers selected Ottawa, Canada, as the next place of meeting, at the close of the convention held at Savannah, Ga.

The Hydrox Chemical Co., Chicago, manufacturer of peroxide of hydrogen, will erect a manufacturing building at 1453 Montrose ave., estimated to cost about \$32,000.

The Butterworth-Judson Corporation has had plans prepared for alterations and improvements in its factory on Doremus ave. near Roanoke ave., estimated to cost \$13,000.

Henry D. Evans, state chemist of Maine, has accepted a position with the Bates Manufacturing Co., Lewiston, Me. He was formerly an instructor in chemistry at Bowdoin College, Brunswick, Me.

There is practically no market in London, England, for arsenic. With regard to zinc, the Nenthead Works of the Vielle Montagne Co., near Newcastle, are now being finally closed down, as the demand for zinc ore is not sufficiently great to enable the mines to work at a profit.

The Monsanto Chemical Company, St. Louis, Mo., has issued an order stating that none but Americans will be employed in its plant, and requiring any alien employee to be naturalized or accept thirty days' notice of discharge. The notice reads: "It is the desire of this company to have associated with it only American-born or naturalized American citizens. The Monsanto is an American institution and is firm in its desire to be American in all its work and operations. The employees' department will assist any employee in perfecting his or her American citizenship."

The Color and Dyestuff Market

Current Spot Quotations of Colors, Dyestuffs, etc., Pages 36 and 48

BENZOL AND TOLUOL OFF THE MARKET

Dye Manufacturers Unable to Obtain Certain Intermediates for Spot Delivery—American Color Makers Announce Production Sold Far Ahead—Spain and Italy Buying Intermediates Here

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Aniline Salt, 2c lb.	Dinitrobenzol, 1c lb.
Benzidine, Base, 15c lb.	Dimethylaniline, 10c lb.
Sulphate, 10c lb.	Paranitraniline, 10c lb.

Declined

No Declines

Trend of the Market

	Today	Last Week	Last Month	Last Year
*Benzol, C. P. gal.	\$.27	\$.27	\$.28	\$.24
Naphthalene, flake lb.	.07	.07	.06	.09
Phenol lb.	.12	.12	.12	.44
Xylol, pure gal.	.40	.40	.40	.45
*Toluol, pure gal.	.28	.28	.24	1.50
Aniline Oil lb.	*.32	.32	.28	.25
Benzaldehyde lb.	.65	.65	.65	3.75
Betanaphthol, dist. lb.	.30	.50	.45	.65
Paranitraniline lb.	1.15	1.05	1.00	1.70
o-Toluidine lb.	.25	.25	.25	1.00
*Nominal				

The production of certain dyes is seriously affected by lack of dye bases. The only stocks reaching the open market are resale lots. The majority of manufacturers are tied up until early summer and, in cases, over the entire year. Buyers are willing to pay almost any price to obtain the intermediates necessary. H-acid is very hard to locate. Aniline salt has been advanced on spot or near-by delivery. Benzidine has advanced, following the heavy demand and lack of offerings. Dinitrobenzol is higher. Dimethylaniline has reached very high levels and has been under speculation among one or two holders of odd lots for early January delivery. Betanaphthol is in limited supply. Paranitraniline is higher, being in heavy request. Benzol and toluol are off the spot market in the East. Production is tied up on contract, and very little material is coming through for resale. Cresylic is firm, with offerings restricted. Flake naphthalene is below the demand.

Intermediates

Acid, H—Stocks on the open market are very limited. Production is sold ahead, and prices are very strong at \$1.75@\$1.80 per pound.

Acid, Phthalic—Consuming requirements are steady, and supplies are ample. The crude is held at 55c@60c per pound, with the anhydride ranging from 60c@90c, owing to competition among sellers.

Acid, Sulphonic—Quotations are holding at 26c@28c per pound, with buying steady.

Aniline Oil—Manufacturers are holding prices firm at 33c@36c per pound on future delivery. Second hands have limited odd lots which are offered at lower figures. Demands are very heavy, with production inadequate to meet requirements. Material for April delivery is held at 36c by some dealers.

Aniline Salt—Sales were closed during the week at 42c. Supplies are tight, and most of the offerings are resale lots. Producers have little to offer on the spot

market, being heavily booked ahead. Material for April delivery is quoted at 42c per pound with tendency to advance.

Anthraquinone—Color makers are active in the market, and export business is developing in Spain and Italy. Prices are steady at \$5.50@\$6.00 for high-grade goods.

Anthracene—The development of vat dyes has stimulated the demand. Prices are 75c@80c for the 80 p. c., and 13½c@15c for the 40 p. c.

Alphanaphthylamine—Offerings are very scarce. Quotations are likely to advance, owing to the continued demand from foreign users. Stocks are held at 35c a pound for domestic deliveries and 33c for export.

Betanaphthol—Fifty-six cents is named for April shipment. Spot goods are very light, being confined to one or two odd lots held at 50c ex-warehouse. Requests for material for export are heavy.

Benzidine—Heavy demands from both domestic and foreign users have practically stripped the market, and prices have advanced and are strong at \$1.25c@\$1.30 per pound on the base. The sulphate is held at \$1.00@\$1.10 per pound.

Dinitrobenzol—Stocks are in moderate request and fair supply at 26c@30c per pound, a slight advance over former levels.

Diethylaniline—The increasing cost of raw materials has caused a slight advance in price on this market. The demand is light and steady at \$1.40@\$1.45 per pound.

Dimethylaniline—Prices are nominal at 90c@\$1.00 per pound for spot goods. Supplies for future delivery are held at 85c on odd lots. Production in quantity is sold up until summer. The stringency is felt by dye makers, some of whom have been forced to suspend operations on certain dyes, which require quantities of dimethylaniline.

Monochlorbenzol—The market continues under heavy buying, with prices strong at 8½c@10c.

Monoethylaniline—Spot goods are held at high levels, because of the scarcity. About \$2.25 a pound is the market.

Orthotoluidine—The market is firmer. Stocks are diminishing and in urgent request at 25c a pound.

Orthonitrotoluol—From 17c@23c is asked, according to holder. Inquiries are light, and stocks are in good supply.

Paranitrotoluol—Imported material is held at \$1.35 per pound, with domestic stocks ranging from \$1.15@\$1.40 per pound. The demand is steady, but not at all spirited.

Paranitraniline—Heavy contracting over 1920 has tightened supplies for spot or near-by deliveries. Because of the sold-up condition, holders are asking higher figures, quoting from \$1.15@\$1.25 for prompt shipment.

Paratoluidine—The spot supply is very limited, with quotations ranging from \$1.75@\$2.00 per pound. Stocks for early January delivery have been quoted at \$1.75 f. a. s. New York, on ton lots.

Resorcin—The technical for prompt shipment is limited. Holders are tied up on contracts for future delivery at \$3.50@\$5.00 per pound.

Coal-tar Crudes

Benzol—The open market was quiet during the week, there being very little spot material available. Production is still below normal, and little will reach the open market until well into 1920. C. P. is held at 27c @ 32c on contract, and 90 p. c. benzol at 26c in tanks and up to 31c in drums.

Cresylic Acid—Heavy buying has strengthened the market. Supplies are light; 95-97 p. c. is held at 75c @ 80c a gallon.

Naphthalene—Flake is scarce and firm at 7c in car lots, sellers' works. Ball is in steady request and in fair supply at 8½c in car lots and up to 9½c in less quantities.

Phenol—Foreign inquiries are strong, but figures for export are not very inviting at 18c @ 20c per pound. Domestic business is steady at 12c @ 17c.

Toluol—Stocks are off the spot market, being tied up on contract business. Quotations are 28c in tanks, and up to 32c in drums on contract. The open market quotation is nominal at 32c.

Dye Bases and Dyewoods

Albumen—Chinese egg continues easy at \$1.45. Consuming demands are small and the supply heavy. Imported blood is off the market. Domestic blood of high-grade material is in good request at 55c @ 60c per pound.

Annatto—Purchases are confined to small lots for immediate needs. Prices are steady at 5½c @ 7c for the seed and about 32c for the fine. Resale lots have passed at slightly lower figures.

Cochineal—The supply is ample. Grey black is held at 62c; rosy black at 65c, and silver at 67c. Concessions are reported on resale business.

Dextrines—The demand is not pressing, and holders are quoting 6¾c @ 7c for the white or yellow corn. Supplies on spot are limited, because of difficulty in releasing shipments at works. Potato is easier at 12c @ 16c per pound.

Fustic—Solid is held at 22c @ 27c a pound; 100 p. c. crystals at 30c @ 40c; 42-degree extract at 14c @ 16½c, and 51-degree liquid at 15c @ 19c. The extract market is stronger. Both the sticks, and chips are in light request and short supply.

Hematin—Heavy inquiry continues, and the market is in short supply at 14c @ 15c for the 51-degree extract, and 30c @ 32c for the 100 p. c. crystals.

Logwood—The market is very active. Prices are firm at 25c for the solid; 28c for the 100 p. c. crystals, and 12c @ 17c for 51-degree Twaddle.

Osage Orange—Forty-two degree extract is firmly held at 9c by first hands and the crystals at 19c. Domestic and foreign buyers are active, with spot supplies rather limited.

\$4,484,000 CONTRACT FOR DYES

An order for \$4,484,000 worth of indigo dyes, probably the largest single order for dyes ever placed in the United States has been received by the Ault & Wiborg Company of Cincinnati. The order came from Hong-kong and Shanghai, China. The dyes are to be delivered during the year 1920 and will be used in the various industries of the Far East Republic. The contract stipulates that the \$4,484,000 is to be paid in American gold.

The Marden, Orth & Hastings Corporation has appealed from a judgment for \$16,774 obtained by Frank Hemingway, Inc., in an action in the Supreme Court, on a contract for H acid.

Dyestuff Notes

The fuchsine plant of the Hydrocarbon Chemical Products Co., Lancaster, Pa., was burned recently with loss estimated at \$150,000.

The Maas & Waldstein Co., Newark, N. J., has leased property on the west side of Riverside ave., adjoining its plant, for factory buildings.

Mill agents who have sounded out buyers among retailers, jobbers and garment manufacturers are convinced that navy blue will be the leading color in staple woolen dress goods.

The Regal Color & Chemical Co., Providence, R. I., has filed notice of organization to operate at 357 Westminster st., for the production of colors and chemicals. James C. Carmack, 124 Winter st., Woonsocket, heads the company.

The National Aniline & Chemical Company, Inc., announces the production of a new dye, known as Alizarol Gray D G. This is a very pleasing shade of pearl gray, and is similar to Alizarol Black 3 G, except that the shade is somewhat redder and duller. It possesses good fastness to light, water, and acids.

DYESTUFFS HIGHER IN JAPAN

(Special Correspondence to DRUG & CHEMICAL MARKETS)

Tokyo, Nov. 27.—The Japanese Government has just lifted the ban on the re-exportation of foreign-made dyestuffs. The demand from consumers has increased. Methyl violet is now quoted at yen 10 per kin. A factor in the industry declares that, on account of the small stocks of American dyestuffs, domestic goods are in better request. As a result of the increase in the cost of production Japanese manufacturers are unable to supply at the former price.

Methanene yellow is quoted now at yen 8 per kin in Tokyo, but the quality was obtainable at yen 7 at the beginning of this month. Toward the close of October it was offered at yen 6.50 per kin. Aniline salt is also higher. The salt was obtainable in Tokyo at yen 1.50 per kin toward the close of October. On Nov. 6 it was yen \$1.90 per kin.

Patent blue has achieved a greater advance recently. It is now quoted at yen 130. It was obtainable at yen 90 a week or so ago.

Sulphur black has advanced, present offers being made by Japanese manufacturers at yen 2 per kin, which is an advance of 80 sen as compared with last week. In this case, the price increase has been partially brought about by the revived demand from China. Lately, a fair shipment of sulphur black was made to China by Japanese manufacturers.

Methylene blue is offered at yen 16 per kin, an advance of yen 1 in a week. Himmel blue has registered a big advance, within the last few weeks. It is now quoted at yen 60 per kin, an advance of yen 20 compared with last week.

Clothing men are laying in their winter needs somewhat actively. Although the revival of Germany's dye trade is often talked about, no German dyes have arrived since the signing of the armistice, according to my informant. Nor are French and British dyes in evidence. Swiss and American goods form the principal part of the foreign supply at present.

American dyes are not, however, being regularly shipped, and the supply can not be depended upon, it is declared in the dye trade here. Swiss goods are supplied only in small parcels.

The Oil Market

Current Spot Quotations of Oils, Page 38; Tallow, Greases, etc., Page 39

OIL PRICES HOLDING FIRM

Speculation Causes Advance in Soya Bean Oil not Warranted by Consuming Demand—Linseed Oil in Good Demand Owing to Short Crop of Flaxseed—Animal and Fish Oils Quiet

PRICE CHANGES IN NEW YORK (Stocks in First Hands)

Advanced

Coconut, Manila, Tanks, Coast,
¾ lb.

Soya Bean, N. Y., Bbls., ¾ lb.

Declined

Palm, Lagos, casks, 1c lb.

Palm, Niger, ¾ lb.

Peanut, Oriental, Coast, 1c lb.

Trend of the Market

	Today	Last Week	Last Month	Last Year
Cod Oil, N. F.	\$1.14	\$1.14	\$1.15	\$1.55
Degras, Amer. bbls.	.07	.07	.07½	.24
Lard, No. 1	1.33	1.33	1.35	1.50
Menhaden, South, crd.	.95	.95	.95	1.20
Neatsfoot, 20 deg. c.t.	2.25	2.25	2.25	3.19
Red Oil, Crude	.16	.16½	.17	.17½
Stearic Acid, T. P.	.30	.30	.30	.35
Coconut, Ceylon, dom. bbls.	.17½	.17½	.17½	.17½
Cottonseed, crude, tanks*	.19½	.19½	.19½	.17½
Linseed cars, bbls.	1.87	1.87	1.72	1.37
Olive, denatured	2.50	2.50	2.50	4.35
Peanut, refined	.26	.26	.27	.22½
Soya Bean, bbls.	.17½	.17½	.18	.18

*F. O. B. Mills

Oil prices are firm, with the exception of one or two items. Large-lot business is greatly curtailed, and buyers are limiting their requirements to immediate needs. Foreign business is slow and hindered greatly by the exchange situation.

Advances took place on coconut oil and soya bean oil. Manila has been under heavy buying, but is in light supply. Speculation among second hands in soya bean oil is given as the cause of higher prices, which are not warranted by the demand by consumers. Palm oil dropped, owing to heavier offerings. Peanut oil, especially Oriental, is lower on the Pacific Coast. Practically all the vegetable oils are quiet and, for the most part, firmly held. Degras is moving slowly. Whale and sperm oil are quiet. All animal and fish oils are in light demand.

Vegetable Oils

Linseed Oil—Because of the shortage of domestic flaxseed, the oil is in active demand and occupies a strong position. The price of \$1.87 per gallon, recently established by crushers, still holds for car lots in barrels for December delivery; \$1.77 for January-February-March; \$1.72 for April and May; and \$1.62 for September. Great interest is evident in the increased importations of seed from Europe. At Duluth, prices of seed were unchanged and nominal for December delivery at \$5.00, and May at \$4.70-\$4.75. At Winnipeg, December and May options were lower, December being held at \$5.07 and May at \$4.96. At Buenos Aires, January shipment was slightly lower at \$2.52. According to the Bureau of Crop Estimates, 8,919,000 bushels of flaxseed were produced in this country during 1919, the value being \$39,145,000, based on prices paid to farmers in December.

Cottonseed Oil—There was a slight upward movement during the latter part of last week, probably due

to new buying for March, May and July, for the South and West, but toward the close, buying fell off, and trading was greatly curtailed. About 20¾c was asked for spot refined oil, with crude held at 18½c per pound in tanks.

Coconut Oil—Manila has stiffened and is very firm at 17c in tanks on the Coast as the inside figure. In most quarters, from 17¼c@17¾c is quoted. Futures, January-March, are held at 17¾c@17½c in tanks. Cochin is slightly higher, being quoted at 19¾c in barrels. For Ceylon type domestic oil in barrels, prices are firmer at 17¾c@18c, and tanks at 17c@17¼c. The market is firm, with good inquiry for all grades.

Peanut Oil—Prices broke sharply during the week on Oriental in sellers' tanks, Coast, and are now 21½c @22c. The market remains quiet, with buying confined to small lots. Domestic refined is unchanged at 26c@27c for barrels on the spot market.

Olive Oil—Inquiry is strong, and consuming demands are absorbing about all stocks that are available; 21c@21½c is asked for tanks on the Coast. Spot quotations are 22½c@23½c in barrel lots.

Palm Oil—The market has an easy tone, and large offerings have caused lower prices. Lagos in casks is quoted at 16¼c on spot, and 15¾c is quoted for prompt shipments from Africa. Niger is held at 15c@15½c.

Soya Bean Oil—Speculation is keener with the demand slightly more active. Sales at 16¾c, in sellers' tanks for December shipment from the Coast were reported. January shipments are firmer around 16½c@16¾c. Spot oil is also higher, being quoted at 17¾c as the inside figure. Resale deodorized oil in odd lots is quoted at 21c.

Animal Oils

Degras Oil—Very little buying interest is reported. The demand is limited and largely routine from regular consuming interests; 7c@7½c is quoted on American oil, while the English is held at 7½c@8½c, according to grade.

Red Oil—Dealers are quoting 16c@16½c, depending upon brand. The market lacks activity and is somewhat easier.

Lard Oil—The demand is largely routine, with prices unchanged at \$1.85 per gallon for prime oil, with off-prime at \$1.75. Extra No. 1 is quoted at \$1.40, No. 1 at \$1.35, and No. 2 at \$1.28 per gallon.

Fish Oils

Cod Oil—Stocks on spot are limited. The demand is light at \$1.12@1.14 for Newfoundland oil, and \$1.10 @1.12 for American.

Menhaden Oil—Light pressed oil is quoted at \$1.18 @1.20, in barrels; bleached winter at \$1.20@1.22; and extra bleached at \$1.22@1.24. The crude is nominal at 90c@95c per gallon, f. o. b. Baltimore.

The soya bean trade situation at Dairen has been undermined by the decline in orders from abroad. The visible stock at Dairen on September 21 was 210,000 tons, or four times that of the same date last year. The soya bean oil trade also has fallen off owing to the restriction placed by the British Government on transactions in vegetable oils generally. This has stopped the shipment of oil to Vancouver and thence across Canada and the Atlantic to England.

SOYA BEAN PRICES ADVANCE

Soya beans are higher owing to the decision of the Japanese Government to suspend the import duties, subject to the Privy Council's approval. At Dairen, traders who have watched the policy of the Japanese Government regarding the importation into Japan of Manchurian beans, are inclined to take full advantage of the report from Tokyo that the Government has finally decided to suspend the duties, and on Nov. 19 they forced up spot goods above yen 12. Green beans were yen 13 spot. Dairen's influence is keenly felt, because the Tokyo soya bean market is largely dependent on Dairen's fluctuations.

A prominent factor in the line says that the main and underlying cause for all changes in the soya bean market can be found in the condition of the crop this year and the restricted arrival at Dairen. The new crop of the year is poor in quality and quantity, but the balance of last season is still found in large parcels in some interior distribution centres in Manchuria, but the South Manchurian Railway's carrying capacity is poor and the arrival of beans at Dairen is unsatisfactory.

Another cause of strength and importance is the boom in bar silver. The silver exchange at Dairen is now 70 to 80 sen above the rate in Japan and sharply fluctuating. This gives the bean operators at Dairen a chance to speculate.

Inquiries from the United States for prices on soya bean oil have failed to mature into much business, because in the United States the year's crop of cotton seeds is known to have been ample, and gives promise that the production of cotton seed oil will increase. Nov. 10 soya bean was covered at yen 37 per picul, but by the 15th the oil was obtainable at yen 34.50 per picul, and on Nov. 27 it was yen 34.

Bean cakes are also booming. The ruling quotations are an increase of 70 to 80 sen. In view of the boom in soya beans, fertilizer men are apprehensive of a boom in cakes. Japanese farmers on their part are inclined to cover their fertilizers as much as possible at present, because sulphate of ammonia, the supply of which is restricted by Great Britain, is advancing in price, while the rice market continues to boom, not being restricted even by the increase in the Bank rate.

Hemet, Calif., is to be the site of a factory for cracking apricot pits and utilizing them in the chemical and dye industries. The proposition is to be financed and managed as a subsidiary of the California Prune and Apricot Growers' Association, which is now considering several sites, which have been offered. As Hemet is the largest apricot growing center of Southern California, the supply of raw material will be ample.

WAR DEMAND FOR OILS

(Continued from Page 8)

as Hongkong oil, but this is not in much demand, and buyers are rather skeptical about it, due to the consistent methods of adulteration which were practised at this port some time ago.

China wood oil is very often adulterated, and for this reason is invariably purchased on analysis, which should show the physical and chemical constants of the oil, in addition to the requisite heat and drying tests which so well characterize pure oil. In the past it was customary to sell most of this oil as "fair average quality pale Hankow China wood oil," which meant nothing, as it was always impossible to determine what fair average quality was until the season's crop was completed, by which time most of the oil was consumed. Another disadvantage of this terminology was that the clause eliminated the word

"purity," thereby causing much unnecessary litigation to establish a claim in the event of adulterated oil.

Sampling of China wood oil should be attended with great care, as many shippers barrel direct from the baskets, and the oil in one shipment may run very un-uniform. This practice, however, is decreasing, many of the large shippers having installed the necessary tanking facilities.

Tallow Seed Oil—Tallow seed oil, obtained from the seed of the "stillingia" plant is an excellent drying oil. It has been imported into this country from China in very limited quantities, most of it going to the continent. It is a red amber in color, and possesses a characteristic odor due to drying the seed over wood fires. The iodine number ranges over 160 and the saponification value about 200. Both the odor and the color could be improved by properly drying the seed.

Sunflower Oil—This oil, obtained from the seed of the plant of the same name, is cultivated in China and Manchuria, but more extensively in Russia. It is pale yellow in color, having very little odor and dries more slowly than linseed oil, falling in the range between linseed and soya bean oil. It is obtained in limited quantities and finds use in special varnishes.

Walnut Oil—Very little of this oil is sufficiently low in price to be used for manufacturing purposes. It is generally obtained by pressing odd lots of walnuts that have become rancid. The oil has only a faint odor, is of golden yellow color and is used mainly in fine artists' colors. It dries well, having an iodine number of about 148.

Core Oils—At one time linseed oil held the field of core oils. These are used to hold the sand for making castings, and when mixed with sand, etc., and moulded into a core are baked and used largely in foundry work.

They invariably contain some linseed, to which there has been added one or more of the following products—mineral, fish, rosin, soya bean oils and various mixtures.

Core oils should be tested principally to ascertain their uniformity and ward off the paying for large amounts of rosin and mineral oils.

Rosin and Rosin Oils

Rosin is used extensively in the varnish industry, especially in connection with China wood oil and also as various metallic resinates (driers) and combined with glycerin as ester gums.

Rosin oil, obtained from the distillation of rosin, is produced in a number of grades, known as first, second, third run and so on. The first run, known as kidney oil, is used extensively in the lubricating grease industry, while the other runs are largely used in the manufacture of printing inks lithographic varnishes and insulating varnishes.

These rosin oils are frequently adulterated by the addition of mineral oil, which makes their testing, from time to time, necessary.

Ceiling and cheap gloss varnishes contain large amounts of rosin, resinates of lime, a volatile solvent, and very often mineral oil.

The break test is generally applied to all oil used for varnish purposes, other than China wood oil, and is occasionally used by paint manufacturers. It consists of placing a small quantity of the oil in a vessel, glass preferred, as it enables one to see, and heating the oil up at the rate of about 20 degrees Fahrenheit per minute, and noting when the oil throws out flocculent matter (which will sometimes not show until after standing over night), similar to foots. Oils suitable for varnish should not break under 600 to 650 degrees Fahrenheit, and preferably should bleach.

The Foreign Markets

Imports of Drugs, Chemicals, Dyestuffs, etc., Pages 39 and 40

BRITISH REMOVE IMPORT RESTRICTIONS

Court Declares Recent Regulations Requiring Permits are Illegal—Importation of Pyrogallie Acid from America Made an Issue—Java Quinine, Ergot, Linseed Oil and Menthol Higher

(Special Cable to Drug & Chemical Markets)

London, Dec. 23.—The market for drugs and fine chemicals has been very active this week. The trade was greatly interested in the court decision which pronounced illegal the import restrictions recently imposed by the Government. Judgment was given in favor of the defendant, an importer of pyrogallie acid, who failed to get a permit for an importation of this product from America, although pyrogallie acid is on the restricted list. Pending an appeal by the Government, all restrictions recently imposed have been raised.

The market is higher for Java quinine by 5d. There is an advance also in ergot, linseed oil, and menthol.

Gallic acid, cream tartar, salicylic acid, and hexamine are firmer.

Cloves and lemon oil are easier.

Prices are lower on castoreum. Recent sales of 3580 pounds of fine quality Hudson Bay product brought 95s per pound at auction. Part of the consignment sold as low as 25s. Of 3194 pounds of Oregon, offered at the same time, 2000 pounds sold at 50s per pound, and a portion at 10s.

THE ORIENTAL STARCH MARKET

(Special Correspondence to Drug & Chemical Markets)

Tokyo, Nov. 27.—The starch trade is a little better and it is hoped confidently by people in the line that no further decline of any considerable size will be registered even if new goods arrive and make the accumulations bigger.

A cablegram from London states that the demand for Oriental starch is springing up once more. To a corresponding degree the tone of the starch market here has improved, but pending the tangible effect of the improvement at London, by way of export business either at Kobe or Odaru, the market will be inactive.

The ruling price at Odaru is yen 9.60 per picul. At Yokohama and Kobe the price is halting round the level of yen 10.40 per picul. The accumulation of stocks and the expected arrival of a large cargo are factors which for the present prevent the price from giving any response to the slight improvement in the market tone. Although Yokohama has no big accumulation on hand, Kobe has a considerable stock, which is estimated by a prominent factor at 3,000 to 4,000 tons. The accumulation at Kobe will soon be beyond 10,000 tons because no less than 6,000 tons have already been forwarded from Odaru to the port.

As regards the immediate prospect one factor declared that the year's production of starch in Hokkaido already had reached 100,000 tons, and is considered a heavy load for producers. However, in the opinion of the trade, they can with a few exceptions stick to this holding policy for a considerable period, and there probably will be no more heavy declines in the price.

PRICES OF ACIDS IN TOKYO

(Special Correspondence to Drug & Chemical Markets)

Tokyo, Nov. 27.—Muriatic acid, which has been halting round yen 6.50 per 100 pounds for more than two months, was advanced to yen 7 per 100 pounds.

Sulphuric acid, 66 per cent, which had been lingering at yen 11 per 200 pounds for several weeks, shot up to yen 21.50, while 65 per cent, quoted at yen 10 per 200 pounds, jumped to yen 19. A prominent holder said that this advance might seem sudden but had been slowly coming on because of the boom in bean cakes, Great Britain's embargo on sulphate of ammonia and the greater demand for domestic goods. Sulphuric acid has been extremely scarce lately.

Nitric acid also imitated "fireworks" by shooting up to yen 25.50 per 100 pounds. The dye industry revival has started a rapid drain on the stock of nitric acid, and manufacturers who have been watching for a chance to raise their price have a pretext.

Potashes are also somewhat higher. Bichromate of potash is up to yen 69 per 100 pounds because of the dye industry revival, the advances overseas and the increasing cost of production. Potassium muriate is yen 38 per 112 pounds, owing to the decrease in the visible stock.

Sodas are somewhat dull and inactive on account of the heaviness of the visible stock. However, caustic soda shows signs of advancing on account of the reported advance in the United States. Recently caustic soda was traded in at yen 11 per 100 pounds. Soda ash failed to move. Bleaching powder is advancing, the position of Japanese alkali works being better. Bleaching powder is in greater demand by paper manufacturers, but its production is still restricted and the visible stock is extremely short. It advanced to yen 16 per 100 pounds, whereas it was obtainable at yen 14.50 per 100 pounds last week.

Zinc oxide is yen 28 per 100 pounds, while zinc dust is quoted at yen 49 per picul.

EXPORTS OF TANNING EXTRACTS

(Special to Drug and Chemical Markets)

Washington, D. C., Dec. 23.—Tanning extracts to the value of \$682,462 were exported during the month of October, according to a report issued by the Bureau of Foreign and Domestic Commerce. England was our most important customer, taking more than two-thirds of the total exported, the only other large customer being Canada. The following table shows the shipments to various countries during the month:

Countries	
Belgium	\$10,419
France	6,374
Norway	4,979
Portugal	3,600
England	458,524
Scotland	7,409
Canada	161,939
Mexico	2,150
Cuba	2,982
Chile	4,143
China	1,902
Japan	7,200
Australia	3,342
New Zealand	2,837

BRITISH SOUTH AFRICA'S IMPORTS

Imports by the British Union of South Africa in 1918 with country of origin are shown in the following table:

Drugs, chemicals and apothecary ware	\$6,103,676
United Kingdom	4,712,310
United States	551,812
Norway	173,403
Japan	175,914
Canada	135,410
France	83,149
Dyestuffs and tanning substances	196,154
United Kingdom	73,353
United States	72,491
Copra	751,315
Zanzibar	655,469
British East Africa	64,802
Portuguese East Africa	15,733
Mauritius	8,765
India	6,545
Glycerin	2,062,822
United Kingdom	1,719,008
Australia	275,872
Argentina	45,317
France	11,144
United States	8,327
Manure and fertilizers	569,979
Japan	232,326
Argentina	141,893
United States	140,418
Portuguese East Africa	9,718
Falkland Islands	5,445
United Kingdom	2,896
Nitrates	1,233,531
Chile	776,737
United Kingdom	456,794
Oils, vegetable	1,655,695
British West Africa	434,248
India	409,093
Argentina	322,698
United Kingdom	144,613
United States	82,959
Zanzibar	70,287
Mauritius	64,442
Paints and colors	1,036,696
United Kingdom	402,654
United States	302,774
Canada	286,963
Perfumery	1,034,151
United Kingdom	549,447
United States	335,389
France	134,247
Japan	9,251
Photographic material	309,217
United Kingdom	195,896
United States	79,480
Plumbago	466,327
Madagascar	460,254
United Kingdom	4,584
United States	1,489
Wax, paraffin and stearin	2,655,800
India	1,745,249
United States	399,087
Dutch East Indies	356,880
United Kingdom	76,404
Zanzibar	31,983
British East Africa	21,063
Portuguese East Africa	20,595

The Board of U. S. General Appraisers has decided that tea oil is entitled to free entry under paragraph 498, tariff act of 1913, as oil commonly used for soap making.

Foreign Trade Notes

The stock of wheat and flax in Argentina available for export at the beginning of September last was 2,597,000 and 224,261 tons, respectively.

The exportation of platinum from Colombia to the United States for the fiscal year ending June 30, 1918, was 48,745 troy ounces, worth \$4,308,520. In addition to this there were exported 18,317 ounces of sheet platinum worth \$264,096.

According to data published in the newspapers of Nicaragua there are two asphalt deposits in the country which are considered very rich, one of them being situated in the vicinity of San Francisco del Carnicero, and the other on the coast of Lago del Granada to the east of the mouth of the Rio Tipitapa.

Notwithstanding difficulties encountered in obtaining maritime storage in Argentina for flax for export, the exports of that commodity in 1918 were greater than those of 1917, and from January 1 to August 31, 1919, rose to 514,688 tons, as compared with 285,102 tons during the same period of 1918, and 61,598 tons in the same period of 1917.

DRUG TRADE OF BARCELONA WITH U. S.

The details of the quantities and values of the declared exports of chemicals and drugs from Barcelona, Spain, to the United States for the calendar years 1917 and 1918, according to invoices certified at the Barcelona consulate general are as follows:

Articles	1917 Value	1918 Value
Chemicals, drugs, and medicines:		
Aconite	\$159,498	
Argols		\$71,910
Ergot	2,476	
Flowers and leaves, crude	3,525	5,856
Fusel oil	10,462	24,817
Gentian root	4,757	2,212
Glycerine, crude	99,034	
Licorice paste	208,989	103,542
Licorice root	371,600	482,393
Lime tartrate	75,268	82,273
Miscellaneous pharmaceutical products ..	89,874	1,148
Potash, carbonate of	87,628	15,979
Potash, saline	16,539	11,827
Thymol	22,221	30,151

WORLD OUTPUT OF MANGANESE

The following figures give the output of manganese ore in the principal producing countries for 1914 in metric tons (1 metric ton=61 poods, or 0.984 long ton):

	Metric tons
Hungary	11,413
Bosnia and Herzegovina	4,120
Brazil	183,630
Canada	25
Greece	558
India	693,824
Italy	1,649
Japan	17,076
Queensland	6
Russia	737,300
Sweden	3,643
United Kingdom	3,496
United States	2,677

The 1913 production in France was 7,732 tons and in Germany 330,797 tons.

Prices Current of Fine and Heavy Chemicals, Drugs, Essential Oils, Dyestuffs and Oils

NOTICE—The prices herein quoted are for large quantities in original packages. All prices are quoted on a basis of avoirdupois pounds and ounces and American gallons. Where the price of a product is indicated by two sets of figures separated by a dash (.16 — .19), it means that various manufacturers or importers of the item quote different prices which are all included within this range.

For the ready reference of foreign buyers, the following table of equivalents is published:

1 Imperial Gallon (Brit.)—1.20 Amer. Gallons	
1 American Gallon—833 Imperial Gallon	
1 American Gallon—3.79 liters	
1 Liter—.264 American Gallon	
1 American Gallon (H ₂ O) weighs 8 pounds	
1 Pound (Avoirdupois) weighs .454 kilogram	
1 Kilogram weighs 2.20 pounds (Avoirdupois)	

Fine Chemicals

Acetanilid, C.P., bbls., blk.	.54	— .55
Acetone	.134	— .15
Acetphenetidin	2.70	— 2.75
Aconitine, Sulph., 1/4-oz. vial	—	—
Adeps Lanae, hydrous, See Lanolin		
Anhydrous, See Lanolin		
Alcohol 188 proof	—	4.70
190 proof, U.S.P.	—	4.75
Cologne Spirit, 190 proof	—	5.00
Wood, ref. 95 p.c.	1.42	— 1.43
97 p.c.	1.45	— 1.46
Denatured, 180 proof	.71	— .73
188 proof	.73	— .75
Aldehyde	1.25	— 1.45
Alcin U.S.P., powd.	.95	— 1.00
Ammonium, Acetate, cryst.	.65	— .70
Benzozate, cryst., U.S.P.	—	4.00
Bichromate, C. P.	.95	— 1.00
Bromide, gran., bulk	.80	— .81
Carb. Dom. U.S.P., powd.	.12	— .124
Chloride U.S.P.	.24	— .25
Hypophosphite	2.10	— 2.15
Iodide	—	4.65
Oxalate, Pure	.83	— .85
Persulphate	.95	— 1.05
Phosphate (Dibasic)	.50	— .60
Salicylate, U.S.P.	.95	— 1.00
Amyl Acetate, bulk, drums	3.65	— 3.75
Antimony Chlor. (Sol. butter of Antimony)	.18	— .20
Needle powder	.10 1/2	— .12
Sulphate, 16-17 per cent free sulphur	.35	— .74
Antipyrine, bulk	5.60	— 5.75
Apomorphine Hydrochloride	—	26.80
Argols	.10	— .11
Arsenic, red, See Heavy Chemicals		
White, See Heavy Chemicals		
Arsenous Iodide, U.S.P.	—	4.85
Aspirin	.95	— 1.00
Atropine, Alk. U.S.P., 1-oz. vial	—	30.00
Sulphate, U.S.P., 1-oz. vial	—	14.00
Barbitol	—	2.25
Barium Carb. prec., pure	.28	— .29
Chlorate, pure	.28	— .29
Iodide	—	5.15
Bay Rum, Porto Rico	3.20	— 3.25
St. Thomas	3.20	— 3.25
Benzaldehyde (see bitter oil of almonds)	4.25	— 4.50
Benzonaphthol	—	34.00
Berberine Hcl.	—	31.00
Acid Sulphate, lb.	—	35.00
Neutral Sulph.	—	35.00
Bismuth Ammon. Citr., U.S.P.	—	5.80
Citrate, U.S.P.	—	3.50
Oxide, pd	—	3.80
Oxychloride	—	3.20
Salicylate	—	2.95
Subbenzoate	—	4.25
Subcarbonate, U.S.P.	—	3.20
Subgallate	—	3.20
Subiodide	—	5.20
Subnitrate	—	2.90

*Nominal

Bismuth Subsalicylate	—	3.50
Tannate	—	2.80
Metallic	2.80	— 2.85
Borax, in bbls., crystals	.08 1/2	— .08 3/4
Crystals, U.S.P., Kegs.	.08 3/4	— .09
Bromides, See Potass. Brom., etc.		
Bromine, tech., bulk	.55	— .65
Cadmium Bromide, crystals	1.75	— 1.80
Iodide	—	4.30
Metal sticks	1.40	— 1.45
Caffeine, alkaloid, bulk	—	7.00
Hydrobromide	8.25	— 8.50
Citrate, U.S.P.	6.00	— 6.25
Phosphate	10.00	— 11.00
Sulphate	9.25	— 9.50
Calcium Glycerophosphate	1.70	— 1.75
Iodide	—	4.50
Phosphate, Precip.	.21	— .23
Sulphocarbonate	.85	— .90
Camphor Am. ref'd bbls.	—	3.30
16's in 1-lb. carton	3.75	— 3.80
24's in 1-lb. carton	3.75	— 3.80
32's in 1-lb. carton	3.75	— 3.80
Japan refined, 2 1/2 lb. slabs	3.60	— 3.65
Monobromated, bulk	—	5.55
(aramel)	1.05	— 1.10
Casein, C.P.	—	.40
Castor Oil, AA bbls.	—	.21
Cerium Oxalate	.74	— .78
Heavy	.04	— .06
Chalk, Precip.	.05 1/2	— .06
Drop	.03	— .03 1/2
Chloral Hydrate, U.S.P. crystals, drums incl'd 100lb. lots	—	.95
Chloroform, drums, U.S.P.	—	.30
Chrysarobin, U.S.P.	—	4.00
Cinchonidin, Alk. crystals	—	1.26
Cinchonine, Alk., crystals	—	.74
Sulphate	—	.45
Cocaine, Hydrochl., Cryst.	—	10.50
Gran. Powd.	—	10.75
Cocoa Butter, bulk	.37 1/2	— .40
Cases, fingers	.45	— .46
Codeine, Alk., 10-oz. lots	—	11.45
Hydrobromide	—	9.10
Nitrate	—	10.30
Phosphate	—	8.60
Sulphate	—	9.10
Cod Liver Oil, Newf'd.	90.00	— 92.00
Norwegian	—	108.00
Colloid, U.S.P.	—	.30
Corrosive Sublimated, see Mercury		
Coumarin, refined, see Aromatic Chemicals		
Cream of Tartar, cryst., U.S.P.	.55	— .56
Powdered, 90 p.c.	.55	— .56
Creosote, U.S.P.	1.15	— 1.20
Carbonate	5.00	— 5.25
Cresol, U.S.P.	1.54	— 1.16
Dionin, See Morph. Ethyl Hydrochl.		
Dover's Powder, U.S.P.	2.80	— 3.00
Emetine, Alk., 15-gr. vials	—	4.00
Hydrochloride, U.S.P.	—	27.00
15 gr., vials	—	1.25
Epsom Salts, see Mag. Sulphate		
Ether, U.S.P., Conc.	—	.17
Washed	—	.26
Nitrous, conc.	1.10	— 1.11
U.S.P., 1880	—	.34
Anaesthesia	—	.21
Eucalyptol, U.S.P., See Aromatic Chemicals		
*Formaldehyde	.52	— .53
Gelatin, silver	1.25	— 1.30
Glycerin, C. P.		
Drums and bbls. added	.23	— .24
C. P. in cans	.25	— .26
Dynamite, drums included	.22	— .22 1/2
Saponifications, loose	.16 1/2	— .16 3/4
Soap Lye, loose	.15 1/2	— .16
Guaiaol, liquid	—	6.80
Carbonate	—	6.50
Harlem Oil, dom.	3.75	— 4.50
Imported	—	5.50
Hexamethylenetetramine	1.30	— 1.35
Hydrastine, Alk.	—	26.50
Hydrochloride	—	26.50
Sulphate	—	26.50
Hydrogen Peroxide, U.S.P., 10 gr. lots		
4-oz. bottles	gross 7.50	— 7.75
8-oz. bottles	gross 11.25	— 11.50
12-oz. bottles	gross 16.25	— 16.50
16-oz. bottles	gross 19.25	— 19.50
Hydroquinone, bulk	1.20	— 2.05
Ichtyol	—	4.50
Iodides, See Potass. Iodide, etc.		
Iodine, Resublimed	—	4.10
Iodoform, Powdered, bulk	—	4.85
Crystals	—	5.35

Iron Citrate, U.S.P., VIII.	—	1.25
and Ammon. Citrate, U.S.P.	—	1.10
Green scales, U.S.P.	—	1.27
Iodide	—	3.90
Syrup, U.S.P. 1900	—	.30
Phosphate, U.S.P.	—	1.06
Pyrophosphate, U.S.P.	—	1.11
Metallic, Reduced	—	.90
*Kamala, U.S.P.	—	4.00
Lanolin, hydrous, cans U.S.P.	.25	— .31
Anhydrous, cans	.35	— .41
Lead Iodide, U.S.P. VIII.	—	2.65
Licorice, U.S.P., Mass.	.54	— .55
Powdered	.80	— .85
Sticks	.80	— .85
Lithium Carbonate	—	1.50
Lupulin	2.25	— 2.50
Lycopodium, U.S.P.	.19	— .20
Magnesium Carb. U.S.P. bbls.	—	2.50
Technical, bbls.	.12	— .12 1/2
Glycerophosphate	—	4.45
Hypophosphite	1.65	— 1.70
Oxide, tins light	—	1.10
Peroxide, cans	—	2.15
Salicylate	.60	— .65
Sulphate, Epsom Salt, tech.		
U.S.P. 100-lbs.	2.00	— 2.10
Manganese Glycerophos.	2.50	— 2.75
Hypophosphite, U.S.P., VIII	2.50	— 3.45
Iodide	—	2.10
Peroxide	.75	— .80
Sulphate, crystals	—	.35
Menthol, Japanese	12.50	— 12.75
Mercury, flasks, 75 lb.	ea. 100.00	— 105.00
Blueplate	—	1.26
Blue Mass	—	.51
Powdered	—	.83
Blue Ointment, 30 p.c.	—	1.10
50 p.c.	—	.59
Citrine Ointment	—	.59
Calomel, Amer.	—	1.63
Corrosive Sublimated, cryst.	—	1.36
Powdered, Granular	—	1.51
Iodide, Green	—	3.81
Red	—	3.91
Yellow	—	3.81
Red Precipitate	—	1.93
Powdered	—	1.93
White Precipitate	—	1.97
Powdered	—	2.02
with chalk	—	.82
Methyl salicylate, see Aromatic Chemicals		
Methylene Blue, medicinal	—	12.00
Milk, powdered	—	.23
Mineral Oil, white	1.00	— 2.00
Morphine, Acet., 25-oz. oz.	—	8.50
Hydrobromide	—	8.50
Hydrochloride	—	8.80
Sulphate	—	8.80
Diacetyl, Alkaloid 10-oz. oz.	—	13.10
Diacetyl, Hydcl.	—	11.85
Ethyl Hydcl.	—	13.45
Opium, cases, U.S.P.	—	6.75
Granular	—	6.50
Powdered, U.S.P.	—	8.50
Oxgall, pure U.S.P.	1.50	— 1.55
Papain	3.50	— 4.00
Paraffin White Oil, U.S.P.	3.10	— 3.60
Paraformaldehyde	—	.75
Paris Green, kegs	—	.30
Pepsin, Powd., U.S.P.	3.00	— 3.40
Petrolatum, light amber bbls.	.07 1/2	— .08
Cream White	.09	— .09 1/2
Lily White	.15	— .16
Snow White	.18	— .20
Phenolphthalein	1.60	— 1.75
Phosphorus, yellow	—	.35
Red	.68	— .70
Pilocarpine	—	10.00
*Podophyllin	—	9.50
Potassium acetate	.75	— .80
Bicarbonate, U.S.P.	.27	— .30
Bisulphate	.45	— .50
C. P.	.75	— .85
Bromide Crystals, bulk	—	.90
Granulated	.85	— .86
Chlorate	.18	— .19
Chromate, crystals, yellow, tech. 1-lb. c. b. 10.	—	.75
Citrate, bulk, U.S.P.	—	1.81
Glycerophosphate, 75% oz.	1.75	— 1.80
Hypophosphite, bulk	1.95	— 2.00
Iodide, bulk	—	3.35
Lactophosphate	—	1.00
Permanganate, U.S.P.	.59	— .60

*Nominal

CHARLES COOPER & CO. 194 Worth Street NEW YORK

Established 1857

Manufacturing Chemists

A partial list of our products are:

AMMONIA ANHYDROUS
CHEMICALLY PURE ACIDS AND AMMONIA
COLLODION AND LACQUERS
ETHER SULPHURIC FOR ANAESTHESIA
ETHYL CHLORIDE
NITRATE SILVER
SOLUBLE COTTON AND ITS SOLVENTS
SULPHITE SODA
SULPHUR FLOUR



WORKS AT NEWARK, N. J.

A FULL LINE OF TECHNICAL, PHOTOGRAPHIC AND MEDICINAL CHEMICALS



Pharmaceutical

Chemicals and Specialties

We solicit your inquiries for the following and other products

Acid Cacodylic (Crystals)
Amidopyrine (Crystals)
Antipyrine (Crystals)
Antipyrine Salicylate
Creosote Carbonate
Creosote Medicinal
Guaiacol Carbonate
Guaiacol (Liquid)
Iron Cacodylate
Mercury Cacodylate
Potassium Guaiacol Sulphonate
Sodium Cacodylate
Sodium Methylarsinate

Write for our price list

E. FOUGERA & CO., Inc.

Established 1849

90-92 Beekman St., New York, N. Y.

R. W. GREEFF & CO.

Incorporated

78 Front Street

Cor. Old Slip

NEW YORK CITY

Exporters

and

Importers

Manufacturers' Agents

Technical and Pharmaceutical
Chemicals

Dye Intermediates and Dyestuffs

Crude Drugs and Essential Oils

Medicinal Preparations

Cable Address: Fergcotrav, Newyork. All Codes used

European Correspondents: R. W. GREEFF & CO.
London and Manchester, England



Acetanilide U.S.P.
Bismuth Subnitrate and
other Bismuth Salts
Codeine and its Salts
Diacetyl-Morphine
Iodoform

The New York Quinine and Chemical Works, Inc.

Manufacturers of
STANDARD MEDICINAL CHEMICALS

135 William St., New York



Morphine and its Salts
Potassium Iodide
Quinine and its Salts
Strychnine and its
Salts
Thymol Iodide

Fine Chemicals, Acids, and Crude Drugs

Potassium Salicylate.....lb.	1.60	— 1.65
Sulphate, C.P.....lb.	1.11	— 1.16
Tartrate, powdered.....lb.	—	— 1.25
Procaine, oz. bottles.....	7.00	— 7.50
5 gr. bottles.....	1.50	— 1.60
Quicksilver, See Mercury.....	—	—
Quinine Sulph., 100-oz. tins.....oz.	—	— 90
1-oz. tins.....oz.	—	— 28
Second Hands, Java.....oz.	1.05	— 1.10
*Second Hands, Amer.....oz.	—	—
Bisulphate, 100-oz. tins.....oz.	—	— 90
Alkaloid.....lb.	—	— 1.29
Acetate.....oz.	—	— 1.29
Benzoate.....oz.	—	— 1.29
Citrate.....oz.	—	— 1.29
Dihyd'chloride.....oz.	—	— 1.29
Hydrochloride.....oz.	—	— 1.19
Hypophosphite.....oz.	—	— 1.29
Phosphate.....oz.	—	— 1.19
Salicylate.....oz.	—	— 1.19
Tannate.....oz.	—	— 90
Quinidine Alk. crystals, tins.....oz.	—	— 1.26
Sulphate, tins.....oz.	—	— 85
Rosearin crystals, U. S. P.....lb.	6.00	— 6.25
Resochin Salt, crystals, bxs.....lb.	—	— 39
Powdered, bbls.....lb.	—	— 39
Rosewater, triple.....lb.	11.50	— 12.00
Saccharin, U.S.P., soluble.....lb.	3.50	— 3.75
U.S.P., Insoluble.....lb.	3.50	— 3.75
Salicin, bulk.....lb.	—	— 30.00
Salol, U.S.P., bulk.....lb.	90	— 95
Santonin, cryst., U.S.P.....lb.	—	— 100.00
Powdered.....lb.	—	— 100.00
Seidlitz Mixture, bbls.....lb.	—	— 30.5
Silver nitrate, 500 oz. lots.....oz.	87 1/2	— 87 1/2
Soap, Castile, white pure.....lb.	26	— 30
Powd., U.S.P., bbls.....lb.	38	— 40
Marcelline, white.....lb.	19	— 20
Ordinary.....lb.	15	— 16
Sodium, Acetate, U.S.P., gran.....lb.	25	— 29
Benzoate, gran., U.S.P.....lb.	75	— 77
Bicarb. U.S.P., powd., bbls.....lb.	—	— 0.24
Bromide, U.S.P., bulk.....lb.	75	— 76
Cacodylate.....oz.	—	— 1.40
Chlorate, U.S.P. 8th Rev.....lb.	—	— 1.56
crystals, c.b. 10.....lb.	—	— 19
Granular, c.b. 10.....lb.	—	— 1.12
Citrate, U.S.P. Cryst. VIII.....lb.	—	— 1.27
Granular, U.S.P. gran. IX.....lb.	—	— 1.27
Cyanide 96-98, see Heavy Chemicals.....lb.	2.15	— 2.20
Glycerophosphate, crystals.....lb.	1.00	— 1.05
Hypophosphite, U.S.P.....lb.	—	— 3.65
Iodide, bulk.....lb.	35	— 40
Peroxide.....lb.	—	— 13
Phosphate, U.S.P., gran.....lb.	17	— 18
Recryst.....lb.	40	— 45
Dried.....lb.	—	— 60
Salicylate, U.S.P.....lb.	—	— 0.14
Sulph. (Glauber's Salt).....lb.	75	— 76 1/2
Strontium Brom. Cryst., blk.....lb.	40	— 45
Carbonate, pure.....lb.	—	— 3.60
Iodide, bulk.....lb.	—	— 65
Salicylate, U.S.P.....lb.	—	— 1.80
Strychnine Alkd., cryst.....oz.	—	— 1.80
Acetate.....oz.	—	— 2.00
Hypophosphite.....oz.	—	— 1.80
Hydrochloride.....oz.	—	— 1.80
Nitrate.....oz.	—	— 1.40
Sulphate, crystals, bulk.....oz.	31	— 32
Sugar of Milk, Powder.....lb.	—	— 85
Cartons, 1 lb.....lb.	—	— 90
Sulphonal, 100-oz. lots.....lb.	16.00	— 16.75
Sulphonemethylmethane, U.S.P.....lb.	13.00	— 14.00
Sulphonemethane, U.S.P.....lb.	3.20	— 3.50
Sulphur, roll, bbls.....100 lbs.	3.35	— 3.75
Flour, 100 p.c. pure.....100 lbs.	3.55	— 3.95
Flowers, 100 p.c. pure.....100 lbs.	—	— 17
Precip., U.S.P.....lb.	—	— 12
Lac Sulphur.....lb.	67	— 67 1/2
Tartar Emetic, tech.....lb.	73	— 73 1/2
U.S.P.....lb.	93	— 95
Terpin Hydrate.....lb.	—	— 10.50
Theobromine Alkaloid.....lb.	11.50	— 12.00
Thymol, crystals, U.S.P.....lb.	—	— 11.50
Iodide, U.S.P., bulk.....lb.	—	— 60
Tin, bichloride, see Heavy Chemicals.....lb.	—	— 1.06
Oxide, 500 lb. bbls.....lb.	—	— 3.00
Toluol. See Coal Tar Crude.....oz.	1.06	— 1.10
Trional.....lb.	8.00	— 8.25
Turpentine, Venice, True.....lb.	—	— 14
Artificial.....lb.	—	— 1.15
Spirits, see Naval Stores.....gal.	—	— 1.15
Vanillin, see Aromatic Chemicals.....gal.	—	— 1.15
Witch Hazel, Ext., dble dist.....gal.	—	— 3.85
Chloride, U.S.P.....lb.	45	— 50
Iodide, bulk.....lb.	—	— 3.85
Metallic, C. P.....lb.	45	— 75
Oxide, U.S.P., bbls.....lb.	22	— 23
Stearate.....lb.	38	— 42

*Nominal

Acids

Acetic, 28 p.c. See Heavy Chemicals

Glacial, See Heavy Chemicals.....	—	—
Acetyl-salicylic.....lb.	96	— 1.00
Benzoic, from gum.....lb.	—	—
U.S.P., ex toluol.....lb.	80	— 85
Boric, cryst., bbls.....lb.	14 1/4	— 14 1/4
Powdered, bbls.....lb.	14 1/4	— 14 1/4
Butyric, Tech., 60 p.c.....lb.	1.45	— 1.55
Camphoric.....lb.	6.00	— 6.20
Carbolic cryst., U.S.P., drs.....lb.	15	— 18
1-lb. bottle.....lb.	—	— 26
5-lb. bottle.....lb.	—	— 23
50 to 110-lb. tins.....lb.	19 1/2	— 20
Liquid, U.S.P.....lb.	—	— 25
Crude, 25%.....gal.	24	— 31
Chromic, U.S.P.....lb.	1.25	— 1.50
Chrysophanic.....lb.	—	— 5.00
Citric, crystals, bbls.....lb.	—	— 87
Powdered.....lb.	—	— 88
Second hands.....lb.	85	— 86
Cresylic, 95-100 p.c.....gal.	75	— 85
Formic, 75 p.c., tech.....lb.	30	— 36
Gallic, U.S.P., bulk.....lb.	1.40	— 1.45
Glycerophosphoric, 25 p.c.....lb.	—	— 2.50
Hydriodic, sp. g. 1.150.....oz.	—	— 19
Hydrofluoric, see Heavy Chemicals.....lb.	40	— 45
Hydrosilicofluoric, 10 p.c. tech.....lb.	50	— 60
20 p.c. tech.....lb.	2.40	— 2.50
Hypophosphorous, 50 p.c.....lb.	60	— 65
U.S.P., 10 p.c.....lb.	—	— 2.20
Lactic, U.S.P., VIII.....lb.	—	— 2.40
U.S.P., IX.....lb.	—	— 8.50
Molybdic, C.P.....lb.	—	— 20
Muriatic, see Heavy Chemicals.....lb.	32	— 35
Nitric, see Heavy Chemicals.....lb.	32	— 33
Nitro Muriatic.....lb.	21 1/4	— 23 1/4
Oxalic, cryst., bbls.....lb.	2.50	— 2.55
Picric, kegs, see Intermediates.....lb.	2.20	— 2.25
Phosphoric, 85-88 p.c. syn. U.S.P.....lb.	52	— 55
50 p.c. tech.....lb.	58	— 60 1/2
Pyrogalllic, resublimed.....lb.	1.50	— 1.50
Crystals, bottles.....lb.	70	— 74
Salicylic, Bulk, U.S.P.....lb.	71	— 74 1/2
Sulphuric, C.P.....lb.	4.40	— 4.50
Sulphurous.....lb.	—	—
Tannic, U.S.P.....lb.	—	—
Tartaric Crystals, U.S.P.....lb.	—	—
Powdered, U.S.P.....lb.	—	—
Trichloroacetic, U.S.P.....lb.	—	—

Crude Drugs

MISCELLANEOUS

Agar, Agar, No. 1.....lb.	85	— 86
No. 2.....lb.	—	— 80
No. 3.....lb.	—	— 75
Almonds, bitter.....lb.	35	— 40
Sweet.....lb.	35	— 40
Meal.....lb.	40	— 45
Ambergris, black.....oz.	—	— 10.00
Grey.....lb.	—	— 23.00
Areca Nuts.....lb.	30	— 32
Powdered.....lb.	33	— 35
Balm of Gilead Buds.....lb.	1.50	— 2.00
Burgundy Pitch, Dom.....lb.	08	— 09
Cantharides, Chinese.....lb.	1.40	— 1.45
Powdered.....lb.	—	— 1.55
Russian, whole.....lb.	—	— 4.00
Powdered.....lb.	—	— 4.30
Charcoal Willow, powdered.....lb.	05 1/2	— 07
Wood, powdered.....lb.	04	— 05
Civet.....oz.	2.50	— 2.75
Colocynth, Apples, Trieste.....lb.	30	— 35
Pulp, U.S.P.....lb.	35	— 36
Spanish Apples.....lb.	45	— 55

*Nominal

Cuttlefish Bones, Trieste.....lb.	60	— 61
Jewelers, large.....lb.	1.70	— 1.75
Small.....lb.	1.55	— 1.60
French.....lb.	55	— 60
Dragon's Blood, Mass.....lb.	35	— 40
Reeds.....lb.	—	— 2.50
Ergot, Russian.....lb.	4.75	— 5.00
Spanish.....lb.	4.75	— 5.00
Grains of Paradise.....lb.	—	— 25
Guarana.....lb.	1.20	— 1.25
Hops, N. Y., prime.....lb.	83	— 87
Pacific Coast, prime.....lb.	85	— 89
Isinglass, American (see Agar Agar).....lb.	—	— 10.00
Russian.....lb.	19	— 21
Kola Nuts, West Indies.....lb.	22	— 23
Honey, Calif.....lb.	—	— 12.00
Leeches.....lb.	75	— 80
Manna, large flake.....lb.	58	— 60
Small flake.....lb.	21	— 23
Moss, Iceland.....lb.	11	— 15
Irish.....lb.	15.00	— 16.00
Musk, pods, Cab.....oz.	25.00	— 26.00
Tonguin.....oz.	23.00	— 25.00
Grain, Cab.....oz.	45.00	— 50.00
Tonguin.....oz.	—	— 30.00
*Synthetic.....oz.	—	— 0.08
Nux Vomica, whole.....lb.	13	— 13 1/2
Powdered.....lb.	—	— 1.25
Poppy Heads.....lb.	48	— 50
Sandalwood.....lb.	55	— 60
Ground.....lb.	2.95	— 3.20
Scammony, resin.....lb.	3.05	— 3.30
Powdered.....lb.	29	— 30
Spermaceti, blocks.....lb.	1.50	— 1.60
Storax, liquid cases.....lb.	11 1/4	— 12 1/4
Tamarinds, bbls.....lb.	—	— 6.5
Kegs.....per keg	—	—

BALSAMS

Copaiba, Para.....lb.	47 1/2	— 50
South American.....lb.	60	— 65
*Fir, Canada.....lb.	—	— 13.50
Oregon.....gal.	1.75	— 2.00
Peru.....lb.	—	— 5.00
Tolu.....lb.	1.50	— 1.60

BARKS

Angostura.....lb.	28	— 30
Basswood Bark, pressed.....lb.	17	— 21
Barberry.....lb.	—	— 1.00
Bayberry.....lb.	50	— 60
Blachaw, of root.....lb.	60	— 65
of Tree.....lb.	35	— 40
*Buckthorn.....lb.	35	— 75
Calisaya.....lb.	95	— 100
Cascara Sagrada.....lb.	15	— 17
Cascarilla, quills.....lb.	—	—
Siftings.....lb.	—	—
Chestnut.....lb.	10	— 10 1/2
Cinchona, red quills.....lb.	1.00	— 1.10
Broken.....lb.	60	— 65
*Yellow "quills".....lb.	—	—
*Broken.....lb.	—	—
*Loxa, pale, b.....lb.	—	—
*Powdered, boxes.....lb.	—	—
*Maracibo, yellow, powd.....lb.	—	—
Condurango.....lb.	10	— 10 1/2
Cotton Root.....lb.	25	— 26
Cramp (true).....lb.	50	— 55
Cramp (so-called).....lb.	50	— 10
Dogwood, Jamaica.....lb.	—	— 10
*Elm, grinding.....lb.	30	— 40
Select bbls.....lb.	75	— 80
Hemlock.....lb.	07	— 08
Lemon Peel.....lb.	10	— 10 1/2
Mezeron.....lb.	22	— 25
Oak, red.....lb.	08	— 09
White.....lb.	08	— 09
Orange Peel, bitter.....lb.	09	— 10
Malaga, Sweet.....lb.	12	— 13
Trieste, sweet.....lb.	10	— 12
Prickly Ash, Southern.....lb.	23	— 25
Northern.....lb.	23	— 25
Pomegranate of Root.....lb.	26	— 28
of Fruit.....lb.	25	— 28
Sassafras, ordinary.....lb.	40	— 45
Select.....lb.	50	— 55
Simaruba.....lb.	50	— 55
Soap, whole.....lb.	15	— 17
Cut.....lb.	23	— 24
Crushed.....lb.	20	— 21
Wahoo, of Root.....lb.	70	— 80
of Tree.....lb.	30	— 35
Willow, Black.....lb.	06	— 07
White.....lb.	07	— 08
White Pine Rosed.....lb.	07	— 08
White Poplar.....lb.	07	— 08
Wild Cherry.....lb.	15	— 21
Witch Hazel.....lb.	08	— 09

*Nominal

Chemical Works Modoery

Ltd.

ESTABLISHED 1902

Basle, Switzerland

Diethylbarbituric Acid
Diacethyltannin
Methylenditannin
Oleoresin Aspidium
Silver Colloidale
Silver Nucleinate
Silver Proteinate
Sulfothyol
Valerates

Write for Quotations

New York Office, 165 Broadway

RHODIA CHEMICAL COMPANY

135 Cedar Street, New York City

Monomethyl P-amidophenol Sulphate
(Our Mark RHODOL)

Acetate Cellulose
Antipyrine
Amidopyrazoline
Dimethylsulphate
Piperazine Hydrate
Saccharin
Hydroquinone

Prompt Deliveries

Telephone Rector 6129

Pharma-Chemical Corporation

MANUFACTURING CHEMISTS

Offer

Creosote Carbonate U.S.P.

Sulphonol U.S.P.

Trional U.S.P.

Salophen

WORKS AND LABORATORIES, BAYONNE, N. J.

General Offices

1564 to 1570 Woolworth Building

Telephone, Barclay 1634-1635

SALICYLIC ACID

U.S.P. * Sublimed

PHENOL, U.S.P.

ASPIRIN, N. & N. F.

ATROPINE SULPHATE
EMETINE HYDROCHLORIDE
YOHIMBIN HYDROCHLORIDE

Midland Trading Corp.

90 West Street, New York

Manufacturers' Agents
Importers Exporters

Cable Midtraco—Phones Rector 2057-8

Crude Drugs—Roots, Gums, Herbs, Flowers, and Seeds

BEANS

Calabar	lb.	.40	—	.45
Castor	lb.	.0634	—	.0634
St. Ignatus	lb.	—	—	.50
St. John's Bread	lb.	—	—	—
Tonka, Angostura	lb.	—	—	1.75
Para	lb.	1.15	—	1.25
Surinam	lb.	1.00	—	1.10
Vanilla, Mexican, whole	lb.	4.50	—	5.50
Cuts	lb.	3.25	—	3.50
Bourbon	lb.	3.00	—	3.25
South American	lb.	3.25	—	3.75
Tahiti, Yellow Label	lb.	2.75	—	3.00
Green Label	lb.	—	—	2.75

BERRIES

Cube, ordinary	lb.	1.35	—	1.40
XX	lb.	1.40	—	1.45
Powdered	lb.	1.40	—	1.45
Fish	lb.	—	—	.30
Horse, Nettle, dry	lb.	.40	—	.45
Juniper	lb.	.07	—	.0734
Laurel	lb.	.08	—	.10
Poke	lb.	—	—	.22
Prickly Ash	lb.	.15	—	.16
Saw Palmetto	lb.	.18	—	.20
Sloe	lb.	.25	—	.30

FLOWERS

Arnica	lb.	.35	—	.40
Borage	lb.	.60	—	.70
Calendula Petals	lb.	—	—	2.75
Chamomile, German	lb.	—	—	—
Hungarian type	lb.	.50	—	.55
Roman	lb.	.35	—	.40
Spanish	lb.	—	—	.45
Clover Tops	lb.	.11	—	.12
Dogwood	lb.	.17	—	.18
Elder	lb.	.50	—	.55
Insect, open	lb.	—	—	.50
Closed	lb.	—	—	.75
Powd. Flowers and stems	lb.	.45	—	.50
Powd. Flowers	lb.	.90	—	1.00
*Kousso	lb.	—	—	.60
Lavender, ordinary	lb.	.18	—	.20
Select	lb.	.26	—	.28
Linden, with leaves	lb.	.35	—	.37
Without Leaves	lb.	.50	—	.55
Malva, blue	lb.	1.00	—	1.10
Black	lb.	.55	—	.60
Mullein	lb.	1.68	—	1.70
Orange	lb.	1.95	—	2.00
Poppy, red	lb.	.95	—	1.10
Rosemary	lb.	.69	—	.70
Saffron, American	lb.	.34	—	.35
Valencia	lb.	14.75	—	15.00
Tilia (see Linden)	lb.	—	—	—

GUMS

Aloes, Barbados	lb.	.98	—	1.05
Cape	lb.	.13	—	.15
Curacao, cases	lb.	.09	—	.0934
Socotrine, whole	lb.	.75	—	.80
Powdered	lb.	—	—	.95
Ammoniac, tears	lb.	—	—	—
Powdered	lb.	—	—	—
Arabic, firsts	lb.	.35	—	.40
Seconds	lb.	—	—	—
Sorts Amber	lb.	.1534	—	.16
Powdered	lb.	.27	—	.30
Asafoetida, whole, U.S.P.	lb.	3.40	—	3.50
Powdered	lb.	4.75	—	5.00
Benzoin, Siam	lb.	.80	—	1.00
Sumatra	lb.	.33	—	.36
Camphor, ref. See Pg. 28 Col. 2	lb.	—	—	—
Catechu	lb.	.11	—	.15
Chicle, Mexican	lb.	1.20	—	1.25
Euphorbium	lb.	.28	—	.30
Powdered	lb.	—	—	.50
Galbanum	lb.	1.38	—	1.45
Gambier	lb.	.11	—	.12
Gamboge	lb.	1.85	—	1.90
Guaiaac	lb.	.70	—	1.00
Hemlock	lb.	.83	—	.90
Kino	lb.	.49	—	.59
Mastic	lb.	1.00	—	1.05
Myrrh, Select	lb.	.85	—	.90
Sorts	lb.	.70	—	.78
Siftings	lb.	—	—	—
Olibanum, siftings	lb.	.15	—	.16
Tears	lb.	.18	—	.30
Opium, See Pg. 28 Col. 3	lb.	—	—	—
Sandarac	lb.	.60	—	.65
*Senegal, picked	lb.	—	—	—
Sorts	lb.	—	—	—
Spruce	lb.	1.00	—	1.30
Storax, Art. cases	lb.	1.25	—	1.60
*Thus, per bbl.	280 lbs.	—	—	28.00
Tragacanth, Aleppo first	lb.	4.75	—	5.00
Seconds	lb.	—	—	4.25
*Thirds	lb.	—	—	2.50
*Nominal.	lb.	—	—	—

LEAVES AND HERBS

*Aconite	lb.	.60	—	.70
Balmory	lb.	.15	—	.17
Bay, true	lb.	—	—	.28
Belladonna	lb.	.28	—	.30
Boneset, leaves and tops	lb.	.16	—	.18
Buchu, short	lb.	2.35	—	2.45
Long	lb.	—	—	—
Cannabis, true, imported	lb.	—	—	—
American	lb.	.29	—	.35
Catnip	lb.	.15	—	.16
Chestnut	lb.	.06	—	.07
Chiretta	lb.	.25	—	.26
*Coca, Huancu	lb.	—	—	—
Truxillo	lb.	.60	—	.70
Coltsfoot	lb.	.18	—	.19
Conium	lb.	.29	—	—
Corn Silk	lb.	.12	—	.14
Damiana	lb.	—	—	.14
Deer Tongue	lb.	.12	—	.14
Digitalis, Domestic	lb.	.27	—	.28
Imported	lb.	.30	—	.32
Eucalyptus	lb.	.10	—	.11
Euphorbia Pilulifera	lb.	.15	—	.16
Grindelia Robusta	lb.	.14	—	.15
Henbane, German	lb.	—	—	—
*Russian	lb.	1.20	—	1.25
Domestic	lb.	.35	—	.40
Henna	lb.	.62	—	.65
Horehound	lb.	—	—	.16
*Jaborandi	lb.	.45	—	.50
Laurel	lb.	.08	—	.0834
Life Everlasting	lb.	.10	—	.11
Liverwort	lb.	.21	—	.25
Lobelia	lb.	.75	—	.80
Matico	lb.	.20	—	.23
Marjoram, African	lb.	.4434	—	.4534
French	lb.	.43	—	.4534
Motherwort herb	lb.	.16	—	.17
Patchouli	lb.	.76	—	.83
Pennyroyal	lb.	.12	—	.16
Peppermint, American	lb.	.26	—	.30
Pichi	lb.	.11	—	.12
Prince's Pine	lb.	.21	—	.22
Plantain	lb.	.12	—	.14
Pulsatilla	lb.	2.50	—	3.00
Queen of the Meadow	lb.	.10	—	.11
Rose, red	lb.	1.10	—	1.15
Rosemary	lb.	.12	—	.14
Rue	lb.	—	—	.65
Sage, Austrian, stemless	lb.	.28	—	.29
Grinding	lb.	—	—	—
*Greek, stemless	lb.	—	—	.20
Spanish	lb.	.15	—	.16
Savory, Alexandria, whole	lb.	.75	—	.80
Half Leaf	lb.	.45	—	.50
Siftings	lb.	.25	—	.28
Powdered	lb.	.30	—	.33
Tinnevely	lb.	.16	—	.24
Pods	lb.	.10	—	.12
Skullcap, Western	lb.	.40	—	.45
Spearmint, American	lb.	.20	—	.22
Squaw Vine	lb.	.28	—	.36
Stramonium	lb.	.36	—	.40
Tansy	lb.	—	—	.15
Thyme, Spanish	lb.	.11	—	.1134
French	lb.	.14	—	.1434
Uva Ursi	lb.	.09	—	.10
Witch Hazel	lb.	.08	—	.10
Wormwood imported	lb.	.14	—	.15
Yerba Santa	lb.	.14	—	.15

ROOTS

Aconite, U.S.P.	lb.	—	—	.90
German	lb.	—	—	—
*Alkanet	lb.	2.25	—	2.50
Althea, cut	lb.	—	—	.85
Whole	lb.	.35	—	.40
Angelica American	lb.	.35	—	.37
Imported	lb.	.59	—	.69
Arnica	lb.	.85	—	1.00
Arrowroot, American	lb.	—	—	.10
Bermuda	lb.	—	—	.60
St. Vincent	lb.	—	—	.17
Bamboo Brier	lb.	.10	—	.12
Bearfoot	lb.	.06	—	.09
Belladonna	lb.	.50	—	.65
Berberis, Aquifolium	lb.	.15	—	.17
Beth	lb.	.18	—	.20
Blood	lb.	.33	—	.38
Blueflag	lb.	.38	—	.40
Bryonia	lb.	.24	—	.26
Burdock, Imported	lb.	.18	—	.19
American	lb.	.16	—	.17
Calamus, bleached	lb.	.60	—	.65
Unbleached, natural	lb.	.20	—	.25
Cohosh, black	lb.	.09	—	.10
Blue	lb.	.13	—	.14
*Nominal.	lb.	—	—	—

Colchicum	lb.	1.50	—	1.60
Colombo, whole	lb.	.34	—	.39
Comfrey	lb.	.25	—	.26
Culver's	lb.	.23	—	.24
Cranesbill, see Geranium.	lb.	—	—	—
Dandelion, English	lb.	.23	—	.24
American	lb.	.21	—	.22
Doggrass, genuine	lb.	.65	—	.70
Cut Bermuda	lb.	.29	—	.30
Echinacea	lb.	—	—	.60
Elecampane	lb.	.14	—	.15
Galangal	lb.	.28	—	.30
Gelsemium	lb.	.16	—	.17
Gentian	lb.	.13	—	.14
Geranium	lb.	—	—	.14
Ginger, Jamaica, unbleached	lb.	.2434	—	.25
Bleached	lb.	.30	—	.32
*Ginseng, Cultivated	lb.	3.00	—	9.00
Wild, Eastern	lb.	5.00	—	10.00
Northwestern	lb.	5.00	—	22.00
Southern	lb.	—	—	—
Golden Seal	lb.	6.00	—	6.10
Powdered	lb.	6.50	—	6.75
*Hellebore, Black, Imported	lb.	1.40	—	1.50
White, Domestic	lb.	.20	—	.21
Powdered	lb.	.21	—	.22
*Imported	lb.	—	—	—
Ipecac, Cartagena	lb.	3.30	—	3.25
Powdered	lb.	3.40	—	3.50
Rio, whole	lb.	8.20	—	3.25
Powdered	lb.	5.50	—	3.60
Jalap, whole	lb.	.80	—	.80
Kava Kava	lb.	.28	—	.30
Lady Slipper	lb.	1.00	—	1.15
Licorice, *Russian, cut	lb.	.80	—	.90
Spanish natural bales	lb.	.17	—	.18
Selected	lb.	—	—	—
Powdered	lb.	.24	—	.25
Lovage, American	lb.	.73	—	.75
Manaca	lb.	.25	—	.26
Mandrake	lb.	.35	—	.36
Musk, Russian	lb.	1.75	—	2.00
Oriss, Florentine bold	lb.	.22	—	.23
Verona	lb.	.20	—	.21
Pareira Brava	lb.	.30	—	.32
Pellitory	lb.	.29	—	.31
Pink, true	lb.	1.25	—	1.50
Pleurisy	lb.	.18	—	.20
Poke	lb.	.12	—	.14
Rhatany	lb.	—	—	—
*Rhubarb Shensi	lb.	—	—	—
Chips	lb.	—	—	—
Cuts	lb.	—	—	—
High Dried	lb.	—	—	1.75
Sarsaparilla, Honduras	lb.	.66	—	.70
American, Honduras	lb.	.38	—	.43
Mexican	lb.	.45	—	.46
Senega, Northern	lb.	2.25	—	2.50
Southern	lb.	2.25	—	2.50
Serpentaria	lb.	.75	—	.80
Skunk Cabbage	lb.	.20	—	.22
Snake, Canada natural	lb.	—	—	.45
Stripped	lb.	.50	—	.55
Spikenard	lb.	.32	—	.35
Squill, white	lb.	.12	—	.13
Stillingia	lb.	—	—	.19
Stone	lb.	.13	—	.14
Turmeric Madras	lb.	.12	—	.1234
Aleppy	lb.	.0834	—	.09
China	lb.	.0734	—	.08
Unicorn false (Helonias)	lb.	.55	—	.60
True (Aletris)	lb.	.95	—	1.10
Valerian, Belgian	lb.	.55	—	.58
*English	lb.	—	—	—
*German	lb.	—	—	—
*Japanese	lb.	—	—	1.25
Yellow Dock	lb.	.13	—	.15
*Yellow Parilla	lb.	—	—	.20

SEEDS

Anise, Levant	lb.	.20	—	.2034
Star	lb.	.1834	—	.1834
Spanish	lb.	.20	—	.2034
Canary, *Spanish	lb.	—	—	—
Morocco	lb.	.0934	—	.10
South American	lb.	.08	—	.0834
Caraway, African	lb.	.12	—	.1234
Dutch	lb.	.1134	—	.12
Domestic	lb.	—	—	—
Cardamom, bleached	lb.	1.50	—	2.00
Celery	lb.	.32	—	.33
Colchicum	lb.	2.00	—	2.10
Conium	lb.	.39	—	.40
Coriander, Bombay	lb.	.0534	—	.0534
Morocco, Unbleached	lb.	.0534	—	.0534
Bleached	lb.	.08	—	.0834
*Nominal.	lb.	—	—	—

BOWRING & Co.

17 Battery Place NEW YORK

Cable Address, "Bowring"

Codes used: Western Union, ABC 5th Edition Bentley's

Exporters and Importers

LICORICE
GUM COPAL
CHIRETTA HERB
COCHINEAL
ESSENTIAL OILS
COCOANUT OIL IN BARRELS
SENNA LEAVES
NUX VOMICA
BEE'S WAX
CASTOR BEANS

*Our facilities enable us to render prompt
and efficient service at minimum charges*

Camphor Tablets

1 oz.— $\frac{2}{3}$ oz.— $\frac{1}{2}$.oz

H. R. Lathrop & Co., Inc.

110 - 116 Beekman Street, New York

Sole Agents

Kitagumi Japan Wax

HERMANS, MARSMAN & Co.

BATAVIA

AMSTERDAM, SOERABAYA, TJILATJAP

Exporters of

Essential Oils

Gum Damar

Pepper

Spices

Gambier

Tin

and all other
East Indian Products

Correspondence Invited

THE *Selden* BRAND

Phthalic Anhydride

PURE Needle CRYSTALS

Moisture	None
Chlorides	None
Chlorine	None
Sulphur	None
Benzoic Acid	None
Phthalic Acid	None
Ash	0.03%
PHTHALIC ANHYDRIDE	99.97%
MELTING POINT	131.9°C.

Containers, 5 to 200 lbs.
Domestic and Export

*New Process, refined to the
HIGHEST DEGREE OF PURITY
No variation in quality*

**THE WALKER
CHEMICAL COMPANY**

Pittsburgh, Pa., U. S. A.

Essential Oils, Oleoresins, Aromatic and Heavy Chemicals

*Cumin, Levant	lb.	—	—
*Malta	lb.	—	—
Morocco	lb.	10½	11
Dill	lb.	11	11½
Fennel, French	lb.	13½	14
German	lb.	14	16
Bombay	lb.	12½	13
Flax, whole	per bbl.	20.00	22.00
Ground	lb.	11	12
Foenugreek	lb.	04	04½
Hemp, Manchurian	lb.	09	09½
Chilian	lb.	09	09½
Job's Tears, white	lb.	05½	06
Larkspur	lb.	26	28
Lobelia	lb.	90	95
Mustard, Bari, Brown	lb.	—	—
Dutch	lb.	25	26
Bombay, Brown	lb.	14½	15
California brown	lb.	16	16½
Chinese, Yellow	lb.	08½	08¾
English, yellow	lb.	22	22½
Parsley	lb.	28	29
Poppy, Dutch	lb.	50	51
Russian blue	lb.	—	—
Indian	lb.	33	34
White Indian	lb.	13	13½
Quince	lb.	1.00	1.10
Kape, English	lb.	—	—
Japanese small	lb.	12½	12¾
Domestic	lb.	09½	10
Sabadilla	lb.	16	17
Stramonium	lb.	25	26
Strophanthus, Hispidus	lb.	1.55	1.60
Kombe	lb.	1.75	2.00
Sunflower, domestic	lb.	—	—
South American	lb.	10	10½
Worm, American	lb.	35	40
Levant	lb.	1.20	1.25

SPICES

Capsicum, African pods	lb.	17	18
Bombay	lb.	15	16
Japan Caps	lb.	19	20
Cassia Buds	lb.	22	24
China, Selected, mats.	lb.	19	20
Saigon, assortment	lb.	45	47
Chilies, Japan	lb.	27	28
Mombasa	lb.	18	19
Cinnamon, Ceylon	lb.	35	55
Cloves, Zanzibar	lb.	50	51
Amboyas	lb.	54½	55
Penang	lb.	70	80
Ginger, African	lb.	12½	13
Jamaica, white good	lb.	27	28
Japan	lb.	14½	15
Mace, Manda, No. 1	lb.	43	44
Banda, No. 2	lb.	41	42
Batavia, No. 2	lb.	38	39
Nutmegs, 110s	lb.	27½	28½
75s-80s	lb.	31	32
Pepper, Black Sing.	lb.	17	17½
White	lb.	28	29
Pimento, Select	lb.	30	31

WAXES

Bayberry	lb.	48	50
Bees, light, crude	lb.	43	44
Light, refined	lb.	48	49
Dark	lb.	47	48
Candelilla	lb.	31	32
Caranaba, Flor.	lb.	95	96
No. 1, North Country	lb.	85	86
No. 2, North Country	lb.	—	65
No. 3, Fatty Gray	lb.	48	50
Chalky	lb.	46	48
Ceresin, Yellow	lb.	14	15
White	lb.	16	17
Japan	lb.	20	21
Montan, crude	lb.	35	36
*Bleached	lb.	—	—
Ozokerite, crude, brown	lb.	35	36
*Green	lb.	—	—
*Refined, white	lb.	—	—
*Domestic	lb.	—	—
Refined, yellow	lb.	—	—
Paraffin, ref'd 128-130 deg. m.p.	lb.	—	08½
*Foreign, 130-132 deg. m.p.	lb.	10	10½
Stearic Acid, see Vegetables Oils, pg. 40			
*Nominal			

Essential Oils

Almond, Bitter, U.S.P.	lb.	9.25	9.75
Bitter, f.f. P. A.	lb.	9.50	10.00
Artificial, U.S.P.	lb.	1.25	2.00
Sweet	lb.	.95	1.00
Peach Kernel	lb.	.45	.47
Anise, U.S.P.	lb.	1.50	1.70
Bay	lb.	5.00	5.25
Bergamot	lb.	4.75	5.25
Artificial	lb.	—	4.25
Bois de Rose	lb.	10.00	10.50
Cajuput, Native	lb.	.85	.90
U.S.P.	lb.	1.00	1.25
Camphor, Sassafrassy	lb.	.12	.14
Japanese, white	lb.	.27	.29
Caraway, Rectified	lb.	5.85	6.00
Cassia, Technical	lb.	2.35	2.40
Lead, Free	lb.	2.45	2.55
Redistilled, U.S.P.	lb.	2.85	2.95
Cedar, Leaf	lb.	2.40	2.50
Cedar Wood, light	lb.	.30	.32
Cinnamon, Ceylon, heavy	lb.	—	28.00
Citronella, Ceylon	lb.	.65	.66
Java	lb.	.95	1.00
Cloves, can	lb.	3.90	3.95
Bottles	lb.	3.95	4.00
Copaiba, U.S.P.	lb.	.90	.95
Coriander, U.S.P.	lb.	—	58.00
Croton	lb.	1.35	1.40
Cubebs, U.S.P.	lb.	9.00	9.75
Cumin	lb.	8.50	9.50
Erigeron	lb.	7.25	7.50
Eucalyptus, Australian, U.S.P.	lb.	1.00	1.05
Fennel, sweet, U.S.P.	lb.	2.75	3.00
Geranium, Rose Algerian	lb.	8.50	9.25
Bourbon (Reunion)	lb.	8.25	8.80
Turkish (Reunion)	lb.	4.75	5.00
Ginger	lb.	7.75	8.00
Gingergrass	lb.	—	3.25
Hemlock	lb.	.90	1.00
Juniper Berries, rect.	lb.	6.50	8.00
Twice rect.	lb.	7.50	9.00
Wood	lb.	1.50	1.75
Lavender Flowers, U.S.P.	lb.	10.00	11.00
Garden	lb.	.75	1.00
Spike	lb.	—	2.00
Lemon, U.S.P.	lb.	1.35	1.50
Lemongrass, Native	lb.	2.90	3.00
Limes, Expressed	lb.	3.50	3.75
Distilled	lb.	1.00	1.10
Linaloe	lb.	6.75	7.00
Mace, distilled	lb.	1.65	1.70
Mirbane, ref. see Aromatic Chemicals			
Mustard, natural	lb.	25.00	30.00
Artificial	lb.	8.50	9.00
Neroli, bigarade	lb.	105.00	120.00
Petale	lb.	140.00	150.00
Artificial	lb.	18.50	25.00
Nutmeg, U.S.P.	lb.	1.70	1.75
Orange, bitter	lb.	3.75	4.25
Sweet, West Indian	lb.	3.75	3.80
Italian	lb.	4.75	5.25
Origanum, Imitation	lb.	.30	.40
Orris Concrete	oz.	5.00	5.25
Patchouli	lb.	25.00	30.00
Pennyroyal, domestic	lb.	1.90	2.05
Imported	lb.	1.75	2.00
Peppermint, Natural, tins.	lb.	—	8.00
Redistilled, U.S.P.	lb.	8.50	8.75
Japanese	lb.	3.75	4.00
Petit Grain, So. America	lb.	—	4.00
French	lb.	9.00	9.50
Pinus Sylvestris	lb.	2.25	2.50
Pumilio	lb.	—	5.25
Rose, French	oz.	15.00	17.00
Bulgarian	oz.	12.00	17.50
Artificial	oz.	2.75	3.25
Rosemary	lb.	1.20	1.25
Rosalewood, East India	lb.	10.50	10.75
Sassafras, natural	lb.	1.80	2.00
Artificial	lb.	.90	.95
Savin	lb.	6.00	6.25
Spearmint	lb.	12.00	12.50
Spruce	lb.	.90	.95
Tansy, Amer.	lb.	6.00	7.00
Thyme, red, French, U.S.P.	lb.	1.70	1.75
White, French	lb.	2.10	2.25
Wintergreen, sweet birch	lb.	6.00	6.15
Genuine Gaultheria	lb.	10.50	10.75
Synthetic, U.S.P., bulk	lb.	—	.75
Wormseed, Baltimore	lb.	6.25	6.50
Wormwood, Dom.	lb.	12.00	12.50
Ylang Ylang, Bourbon	lb.	—	15.00
Manila	lb.	25.00	45.00
Artificial	lb.	—	24.00

OLEORESINS

Capsicum, 1-lb. bottles	lb.	4.00	4.25
Aspidium (Malefern)	lb.	10.00	11.00
Anethol	lb.	7.75	8.00
Ginger	lb.	4.90	5.25
Malefern	lb.	—	10.00
Mullein (so-called)	lb.	5.00	5.25
*Orris, domestic	lb.	—	20.00
Imported	lb.	20.00	21.00
*Paralei Fruit (Petroselinum)	lb.	7.50	8.00
Pepper, black	lb.	—	7.00

Aromatic Chemicals

Acetophenone	lb.	4.50	5.75
Amyl Salicylate	lb.	1.55	2.00
Anethol	lb.	2.75	3.00
Anisic Aldehyde, C.P.	lb.	7.00	7.25
Benzyl Acetate	lb.	2.00	2.50
Benzyl Alcohol	lb.	2.25	2.75
Benzyl Benzoate	lb.	3.50	4.50
Imported	lb.	—	—
Borneol	lb.	—	3.50
Bromostyrol	lb.	11.50	12.00
Cinnamic Acid	lb.	5.00	6.00
Cinnamic Alcohol	lb.	40.00	45.00
Cinnamic Aldehyde	lb.	7.25	7.50
Citral	lb.	4.50	4.75
Citronellol	lb.	16.00	18.00
Imported	lb.	—	30.00
Coumarin	lb.	8.00	8.50
Ethyl Cinnamate	lb.	6.00	8.00
Eucalyptol	lb.	1.40	1.65
Eugenol	lb.	5.50	6.50
Geraniol, from Citronella	lb.	3.50	5.00
Geranyl Acetate	lb.	5.75	6.50
Geranyl	lb.	—	—
Heliotropin	lb.	4.25	4.50
Indol, C. P.	oz.	—	20.00
Imported	oz.	—	30.00
Iso-Eugenol	lb.	9.00	9.25
Linalol	lb.	7.00	10.00
Linalol Acetate	lb.	13.50	15.00
Linalol Benzoate	lb.	12.50	18.00
Menthyl	lb.	12.50	14.00
Methyl Anthranilate	lb.	—	14.00
Methyl Cinnamate	lb.	7.00	7.25
Methyl Paracresol	lb.	—	16.00
Methyl Salicylate	lb.	—	.75
Mirbane, rect., drums extra.	lb.	.15	.16
Musk Ambrette	lb.	92.00	100.00
Musk Ketone	lb.	—	45.00
Musk Xylene	lb.	12.00	14.00
Phenylacetaldehyde	lb.	50.00	55.00
Phenylethyl Alcohol	lb.	38.00	40.00
Phenylacetic Acid	lb.	12.00	20.00
Rhodinol	lb.	18.00	20.00
Imported	lb.	—	30.00
*Safrol	lb.	—	—
Terpineol, C. P.	lb.	—	1.25
Imported	lb.	—	1.70
Thymol	lb.	11.50	12.00
Vanillin	oz.	.95	1.05
Violet, artificial	lb.	12.00	18.00

Heavy Chemicals

Acetic acid, 28 p.c., bbls. Incl.	100 lbs.	—	3.75
56 p.c., bbls.	100 lbs.	—	6.50
70 p.c., bbls.	100 lbs.	—	7.50
30 p.c., bbls.	100 lbs.	—	8.00
Redistilled	100 lbs.	—	8.50
Pure	100 lbs.	—	9.00
Glacial, bbls.	12.75	13.25	
Alum, ammonia, lump	lb.	.04	.04½
Ground	lb.	.04½	.04
Powdered	lb.	.04½	.04
Chrome	lb.	.15	.16
Potash lump	lb.	.0734	.08
Chrome	lb.	.17	.18
Ground	lb.	.09	.09½
Alum, Potash, Powdered	lb.	.0734	.08
Soda, Ground	100 lbs.	—	6.25
Aluminum chloride, carboys.	lb.	—	.15
Anhydrous	lb.	2.75	3.00
Sulph.	lb.	1.70	1.85
Low grade	lb.	1.70	1.85
Aluminum hydrate light	lb.	.14	.16
Heavy	lb.	.07½	.08½
Arsenic, white	lb.	.10	.12
Red	lb.	.20	.25
Arsenious Acid	lb.	.11	.11½
Ammonia, Anhydrous	lb.	.33	.35
Ammonia Carbonate	lb.	.12¾	.13½
Ammonia Water, 26 deg., car.	lb.	—	.10½
20 deg., carboys	lb.	—	.09½
18 deg., carboys	lb.	—	.08½
16 deg., carboys	lb.	—	.07½
*Nominal			

OILS ESSENTIAL OILS

AND

Aromatic Chemicals

**Manufacturers
Importers
Exporters**

Correspondence Solicited

FRITZSCHE BROTHERS

Inc.

NEW YORK

ROCKHILL & VIETOR

Established 1884

22 CLIFF STREET NEW YORK

Essential Oils

Miscellaneous Chemicals

SANDALWOOD, E. I., U.S.P.

ROSE (Otto Rose), Bagaroff Brand

ROSE (Otto Rose), French, B. F.

ORANGE OIL, Sweet Italian & West Indian

LEMON MUSTARD, Artificial

Sole Agents in United States and Canada
for Bertrand Freres, Grasse Fr., and N. V.
Chemische Fabriek, Naarden, Holland

All Codes. Cable Address, Rockhill Newyork

COMPAGNIE MORANA

Raw Materials

FOR

Perfumers

AND

Soapmakers

118 East 27th Street
New York

19 S. La Salle Street
Chicago

Cable Address: Moranaco, Newyork

Van Dyk & Company

Inc. 1904

MANUFACTURERS OF
A COMPLETE LINE OF

OILS

**For making Perfumes, Toilet
Waters, Toilet Preparations,
and Flavoring Extracts**

*Have you tried our VANILIDINE A?
It is better than the Bean*

4-6 PLATT STREET

NEW YORK

Heavy Chemicals, Coal-tar Crudes, Intermediates, and Colors

Ammonium chloride, U.S.P. ....lb.	—	—	23 1/2	Pyroligneous Acid, Tech. ....gal.	12	—	13 1/4	Dinitronaphthalene ....lb.	45	—	50
Sal Ammoniac, gray. ....lb.	—	—	12 1/2	Saltpeetre, Graulated ....lb.	—	—	13 1/4	Dinitrotoluol ....lb.	38	—	40
Granulated, white ....lb.	15	—	16	Soda Ash, 58 p.c. light. ....100 lbs.	1.90	—	2.15	Diphenylamine ....lb.	53	—	58
Lump ....lb.	23 1/2	—	26	Dense 58 p.c. bags. ....100 lbs.	2.40	—	2.65	Diethylnaphthalene ....lb.	—	—	—
Sulphate, foreign ....100 lbs.	7.00	—	7.10	Caustic, 76 p.c. ....lb.	—	—	—	"G" Salt ....lb.	65	—	75
*Dom., double bags. ....100 lbs.	7.00	—	7.10	F. o. b. Wks. ....100 lbs.	—	—	4.18	Hydrazobenzene ....lb.	1.50	—	2.00
Antimony, Sulphuret ....lb.	—	—	—	F. A. S. ....100 lbs.	4.25	—	4.38	Metaphenylenediamine ....lb.	1.10	—	1.15
Crimson F. ....lb.	—	—	40	Ground, 76 p.c. ....100 lbs.	4.25	—	4.50	Metanitriline ....lb.	3.40	—	3.60
Golden No. 1. ....lb.	—	—	35	Sodium Acetate ....lb.	0.64	—	0.7	Metanitroparatoluidine ....lb.	—	—	—
No. 2. ....lb.	—	—	30	Bichromate ....lb.	30	—	35	Methylantraquinone ....lb.	—	—	—
Vermillion ....lb.	—	—	35	Bisulphate ....lb.	—	—	7.00	Monochlorobenzol ....lb.	0.9	—	1.2
Blanc Fixe, dry ....lb.	0.34	—	0.45	Carbonate, Sal. Soda in bbls. ....lb.	1.25	—	1.35	Monothylaniline ....lb.	2.15	—	2.25
Barium, chloride ....ton	95.00	—	105.00	Bicarbonate ....lb.	2.35	—	2.45	Naphthalenediamine ....lb.	—	—	—
Imported ....ton	95.00	—	105.00	Chlorate ....lb.	12	—	15	a-Naphthol, crude ....lb.	90	—	95
Binoxide ....lb.	23	—	25	Cyanide 96-98 ....lb.	30	—	32	b-Naphthol, distilled ....lb.	—	—	—
Nitrate ....lb.	11	—	13	Hyposulph. bbls. gran. ....100 lbs.	—	—	3.60	Sublimed ....lb.	65	—	75
Barytes, floated, white. ....ton	25.00	—	35.00	Kega ....100 lbs.	—	—	3.85	a-Naphthylamine ....lb.	33	—	35
Off color ....ton	14.00	—	18.00	Nitrate, tech. ....100 lbs.	2.95	—	3.15	b-Naphthylamine, tech. ....lb.	1.15	—	1.25
Bleaching Pd., f.o.b.wks. ....100 lbs.	2.50	—	2.75	Phosphate ....lb.	3.25	—	3.40	Neuville Winter's Acid. ....lb.	1.70	—	1.90
Export F.A.S. ....100 lbs.	—	—	3.15	Refined ....lb.	0.7	—	0.7 1/2	Nitrobenzol ....lb.	16	—	17
Calcium Acetate ....100 lbs.	2.00	—	2.30	Nitrite ....lb.	12 1/4	—	13	Nitrochlorobenzol ....lb.	40	—	45
Carbonate ....lb.	0.14	—	0.24	Prussiate, Yellow ....lb.	24	—	25	Nitronaphthalene ....lb.	30	—	35
Extra Light ....lb.	0.4	—	0.8	Silicate, 60 deg. ....lb.	2.85	—	3.25	o-Nitrophenol ....lb.	75	—	85
Light ....lb.	0.63	—	0.44	40 deg. ....lb.	0.2	—	0.25	p-Nitrotoluol ....lb.	1.15	—	1.40
Heavy ....lb.	0.8	—	0.4	Sulphide, 60 p.c. ....lb.	0.5	—	0.5 1/2	Nitrotoluol ....lb.	—	—	—
Chloride, solid, f.o.b.N.Y. ....ton	20.00	—	25.00	30 p.c. crystals. ....lb.	0.3	—	0.35	o-Nitrotoluol ....lb.	17	—	23
Granulated, f.o.b. N.Y. ....ton	—	—	—	Sulphite ....lb.	0.3	—	0.35	Para-Ambiphenol, Base ....lb.	2.50	—	4.00
Chlorine, liquefied ....lb.	0.09 1/2	—	10 1/2	Sulphate, GLb, sal. ....100 lbs.	0.8	—	1.50	H. C. L. ....lb.	1.15	—	1.25
Carbon bisulphide ....lb.	—	—	0.6	Sulphur dioxide Com. ....lb.	0.4	—	1.00	Paranitraniline ....lb.	2.40	—	2.50
Carbon tetrachloride ....lb.	—	—	11	Sulphur crude ....ton	25.00	—	30.00	p-Phenylenediamine ....lb.	60	—	90
Copper Carbamate ....lb.	—	—	28	Flour Com'l., bbls. ....100 lbs.	1.60	—	2.00	Phthalic Anhydride ....lb.	—	—	75
Subacetate (Verdigris) ....lb.	45	—	48	Roll, 100 p.c. ....100 lbs.	3.20	—	3.50	Pseudo-Cumol ....lb.	—	—	65
Powdered ....lb.	40	—	42	Flowers, 100 p.c. ....100 lbs.	3.55	—	3.95	"P" Salt ....lb.	3.50	—	5.00
Cyanide chlor. Mix., 73-76. ....lb.	27	—	28	Sulphuric Acid, Tank carlots	—	—	16.00	Resorcin, Technical ....lb.	3.50	—	5.00
Sulphate, 98-99 p.c. ....100 lbs.	8.12 1/2	—	8.37 1/2	66 deg., f.o.b. wks. ....ton	21.00	—	23.00	Sodium Naphthionate ....lb.	55	—	60
99 p.c. carlots, N.Y. ....100 lbs.	8.25	—	8.50	66 deg., f.o.b. wks. ....ton	22.00	—	25.00	Schaefer Salt ....lb.	—	—	1.9
Copperas, f.o.b. works. ....100 lbs.	1.20	—	1.30	Oleum, f.o.b. wks. ....ton	50	—	60	Tetranitromethylamine ....lb.	—	—	1.65
Fluorspar, Powdered ....ton	75.00	—	80.00	Tannic Acid, Tech. ....lb.	21 1/2	—	22 1/2	Tolidin ....lb.	44	—	50
Acid Grade ....ton	50.00	—	60.00	Tin, bichloride ....lb.	43	—	45	Mix Toluidine ....lb.	25	—	30
Fusel Oil, crude. ....gal.	2.50	—	2.85	Crystals ....lb.	1.50	—	1.75	o-Toluidine ....lb.	1.75	—	2.00
Refined ....gal.	3.75	—	3.80	Whiting ....100 lbs.	18	—	21	p-Toluidine ....lb.	1.25	—	1.35
Hydrofluoric Ac. 48 p.c. bbls. ....lb.	0.8	—	0.9	Zinc, carbonate ....lb.	0.8	—	1.0	m-Toluylenediamine ....lb.	40	—	50
48 p.c. in carboys. ....lb.	11	—	12	Chloride, Fused ....lb.	11	—	13	Xylene, pure ....gal.	—	—	50
52 p.c. in carboys. ....lb.	05	—	07	Granulated ....lb.	12	—	13	Xylene, Com. ....gal.	—	—	50
Lactic Acid, 22 p.c. ....lb.	14	—	14 1/4	Oxide, French ....lb.	0.84	—	1.05	Xylidine ....lb.	—	—	—
Lead, Acetate, white crys. ....lb.	13 1/2	—	14	Leaded ....lb.	—	—	—				
Broken Cakes ....lb.	13 1/2	—	14								
Granulated ....lb.	28	—	30								
Arsenate, powdered ....lb.	16	—	17								
Paste ....lb.	09	—	13								
Nitrate ....lb.	09	—	13								
Oxide, Litharge, Amer. pd. ....lb.	10 1/2	—	13								
Foreign ....lb.	10 1/2	—	13								
Red, American ....lb.	09 1/2	—	13								
Sulphate, basic ....lb.	09 1/2	—	13								
White, Basic Carb., Amer. ....lb.	09 1/2	—	13								
dry ....lb.	09 1/2	—	13								
in Oil, 100 lbs. or over. ....lb.	07	—	07 1/4								
English ....lb.	07	—	07 1/4								
Lithopone ....lb.	2.00	—	2.05								
Lime, hydrate ....100 lb.	17	—	22								
Acetate ....lb.	15	—	16								
Sulphur solution ....gal.	15	—	17								
Manganese Chlor. ....lb.	62.00	—	65.00								
Sulp. ....lb.	03 1/2	—	04								
Magnesium ....ton	1.65	—	1.75								
f.o.b. N. Y. ....lb.	40	—	50								
Muriatic acid, ....100 lbs.	14	—	16								
18 deg. carboys. ....100 lbs.	12	—	13								
22 deg. carboys. ....100 lbs.	05	—	05 1/4								
Nickel oxide ....lb.	06 1/2	—	06 1/2								
Salts, single ....lb.	06 1/2	—	07								
double ....lb.	07 1/2	—	07 1/4								
Nitric acid, 63 deg. carboys. ....lb.	33	—	38								
*38 deg. carboys. ....lb.	21 1/2	—	25 1/2								
40 deg. carboys. ....lb.	60	—	70								
42 deg. carboys. ....lb.	35	—	40								
Phosphoric Acid, 85-88 p.c. ....lb.	1.50	—	1.60								
50 p.c. tech. ....lb.	1.75	—	1.80								
Phosphorus red ....lb.	28	—	32								
Yellow ....lb.	1.00	—	1.10								
Sesquisulphide ....lb.	30	—	32								
Plaster of Paris ....bbl.	65	—	70								
True Dental ....bbl.	24	—	28								
Potash Caustic, 88-92. ....lb.	28	—	32								
Sticks ....lb.	1.00	—	1.10								
Potassium Bichromate ....lb.	18	—	20								
Carbonate, calc. U.S.P. ....lb.	30	—	32								
80-85 p.c. ....lb.	24	—	28								
85-90 p.c. ....lb.	34	—	38								
90-95 p.c. ....lb.	18	—	20								
*96-98 p.c. ....lb.	18	—	20								
Chlorate, cryst. ....lb.	18	—	20								
Powdered, American ....lb.	36	—	39								
Japanese ....lb.	55	—	60								
Muriate, basis 80 p.c. ....lb.	90	—	145								
Foreign ....lb.	33	—	35								
Permanganate, Com'l. ....lb.	—	—	85.00								
Prussiate, red ....lb.	—	—	171 80								
Yellow ....lb.	—	—	—								
Sulphate ....lb.	—	—	—								

Dyestuffs, Tanning Materials and Accessories

COAL-TAR CRUDES

*Benzol C. P. ....gal.	27	—	32
(90 p.c.) ....gal.	26	—	31
Cresylic acid, crude, 95-97 p.c. ....gal.	75	—	80
50 p.c. ....gal.	—	—	60
25 p.c. ....gal.	15 1/4	—	17
Cresol, U.S.P. ....lb.	40	—	45
Cresote oil, 25 p.c. ....gal.	40	—	45
Dip. oil, 25 p.c. ....gal.	40	—	45
Naphthalene, balls ....lb.	0.8 1/2	—	0.9 1/2
Flake ....lb.	0.7	—	0.8
*Phenol ....lb.	12	—	17
Export ....lb.	19	—	20
Pitch, various grades ....ton	14.00	—	18.00
Solvent naphtha, waterwhitegal.	22	—	25
Crude heavy ....gal.	16	—	18
*Toluol, pure ....gal.	28	—	32
*Commercial, 90 p.c. ....gal.	28	—	32
Xylol, pure water white ....gal.	40	—	45
Commercial ....gal.	30	—	35

INTERMEDIATES

Acid B ....lb.	—	—	2.25
Acid Cleve ....lb.	2.00	—	2.15
Acid H ....lb.	1.70	—	1.75
Acid Metanilic ....lb.	1.60	—	1.75
Acid Monsulphonic ....lb.	—	—	15
Acid Naphthionic, Crude ....lb.	65	—	75
Refined ....lb.	1.00	—	1.10
Acid Picric ....lb.	25	—	50
Acid Sulphanilic, crude ....lb.	25	—	30
Refined ....lb.	—	—	35
*Aminozobenzene ....lb.	33	—	35
*Aniline Oil ....lb.	42	—	45
*Aniline Salts ....lb.	60	—	65
Aniline for red ....lb.	65	—	70
Anthracene (40 p.c.) ....lb.	65	—	70
Anthracene (80 p.c.) ....lb.	5.50	—	6.00
Anthraquinone ....lb.	75	—	85
Benzaldehyde, Tech. ....lb.	1.25	—	1.35
U.S.P. & F.F.C., see Aromatic Chemicals	1.00	—	1.10
Benzidine Base ....lb.	80	—	85
Benzidine Sulphate ....lb.	26	—	28
Benzoate of Soda, U.S.P. ....lb.	—	—	6.00
Benzylchloride, 95-97 ....lb.	10.00	—	12.00
Diamidophenol ....lb.	30	—	32
Dianisidine ....lb.	15	—	16
Dinitrophenol ....lb.	26	—	30
o-Dichlorobenzol ....lb.	1.40	—	1.45
Dinitrobenzol ....lb.	90	—	1.00
Diethylaniline ....lb.	23	—	28
Dimethylaniline ....lb.	—	—	—
Dinitrochlorbenzene ....lb.	—	—	—
*Nominal.	—	—	—

COAL-TAR COLORS

ACID COLORS:			
Black	lb.	1.15	— 1.70
Blue	lb.	3.00	— 5.00
Brown	lb.	1.25	— 2.00
Fuchsin	lb.	2.50	— 3.50
Orange 11	lb.	.45	— .50
Orange 111	lb.	1.00	— 1.25
Red	lb.	1.10	— 1.20
Scarlet	lb.	—	— 1.00
Violet 10B	lb.	—	— 6.50
Amidine Yellow R.	lb.	—	— 1.50
Alpine Yellow	lb.	2.00	— 7.50
Alkaline Blue, Dom.	lb.	—	— 4.75
Alkaline Blue, Imp.	lb.	—	— 8.00
Azo Carmine	lb.	—	— 4.00
Azo Yellow	lb.	—	— 2.00
Azo Yellow, green shade.	lb.	3.50	— 4.50
Brilliant Delphine B.S.	lb.	12.00	— 14.00
Erythrosine	lb.	—	— 3.00
Fast Light Yellow 2-G.	lb.	—	— 3.00
Fast Red 6B extra, con't.	lb.	—	— 3.00
Granine	lb.	8.75	— 9.25
Indigo 20 p.c. paste.	lb.	—	— .75
Indigotine, conc.	lb.	3.00	— 3.50
Indigotine, paste	lb.	1.50	— 1.60
Metanil Yellow	lb.	1.50	— 1.60
Medium Green	lb.	5.00	— 6.00
Naphthol Green	lb.	—	— 1.50
Naphthylamine Red	lb.	6.75	— 7.50
Nigrosine Oil Sol.	lb.	—	— 7.50
Orange R. con't.	lb.	2.00	— 2.25
Orange Y conc.	lb.	.50	— .60
Patent Blue, Swiss Type.	lb.	12.00	— 16.00
Ponceau	lb.	—	— 1.00
Scarlet 2R	lb.	1.00	— 1.10
Tartrazine, Dom.	lb.	—	— 1.50
Tartrazine, Imp.	lb.	1.25	— 1.40
Uranine	lb.	10.00	— 11.00
Wool Green S. Swiss.	lb.	6.00	— 7.00
DIRECT COLORS:			
Black	lb.	.95	— 1.10
Blue	lb.	3.25	— 3.75
Brown	lb.	—	— 1.15
Brown	lb.	1.55	— 1.75
Bordeaux	lb.	1.75	— 2.50
Fast Red	lb.	3.50	— 6.00
Fast Yellow	lb.	1.50	— 2.50
Yellow	lb.	2.00	— 4.00
Violet con't	lb.	2.20	— 2.50
Benzo Purperine 10B.	lb.	3.50	— 4.00
Benzo Purperine 4B.	lb.	1.80	— 1.90
Chrysophenine, Dom.	lb.	—	— 2.50
Chrysophenine, Imp.	lb.	—	— 2.50
Congo Red	lb.	1.60	— 2.25
Diamine Sky Blue F F.	lb.	3.00	— 5.25
Oxamine Violet	lb.	7.00	— 8.00
Primuline, Dom.	lb.	—	— 3.00

WHITING

FOR
PROMPT AND FORWARD
DELIVERY

PACKING { COTTON-DUCK BAGS
BARRELS
PAPER BAGS



Write or Phone for Quotation Today

INDUSTRIAL CHEMICAL CO.

Manufacturers

FIFTH AVENUE BUILDING

NEW YORK CITY

Gramercy 3242

W

W

**Carbon Tetrachloride
Phosphorus Oxychloride
Sodium Phosphate, U.S.P.
Carbon Bisulphide**

**THE WARNER
CHEMICAL COMPANY**

Manufacturers

52 Vanderbilt Avenue, New York

Telephone Murray Hill 262

PLANTS

Carteret, N. J.

South Charleston, W. Va.

W

W

WILLIAMSON & Co.

28-30 Burling Slip, New York

BROKERS

Intermediates

and

Dye Bases

SPECIALTIES

Amidonaphthol Sulphonic Acids

Phthalic Anhydride

Nitrated Phenols



CHEMICALS

**For Soapmakers,
Perfumers, etc.**

Boracic	Pine Oil
Alumina Hydrate	Potash Caustic
Ammonia Sulphate	Rosin
Borax	Silex
Calcium Carbonate	Soda Ash
Colors	Soda Caustic
Magnesia Carbonate	Soda Silicate
Myrbane Oil	Talc
Zinc Stearate	

KATZENBACH & BULLOCK CO.

76 John Street, New York, N. Y.

Boston Trenton Montreal Akron
Chicago San Francisco Paris Buenos Ayres

Cable Address: KABOCK NEWYORK All codes

Natural Dyestuffs, Tanning Materials, Fixed Oils, and Fats

OIL COLORS:

Black	.....lb.	.70	- 1.00
Blue	.....lb.	1.65	- 2.00
Orange	.....lb.	1.40	- 1.50
Red III	.....lb.	1.65	- 2.00
Red IV	.....lb.	1.80	- 3.30
Scarlet	.....lb.	1.75	- 2.00
Yellow	.....lb.	1.70	- 2.00
Nigrosine, sps. sol.	.....lb.	—	.85
Nigrosine, water sol., blue	.....lb.	—	.65
Jet	.....lb.	.90	- 1.00

SULPHUR COLORS:

Black	.....lb.	.30	- .40
Blue Dom.	.....lb.	.80	- .90
Brown	.....lb.	.35	- .45
Green	.....lb.	1.00	- 2.00
Yellow	.....lb.	.90	- 1.00

CHROME COLORS:

Alizarin Blue, bright	.....lb.	7.75	- 9.25
Alizarin, medium	.....lb.	6.25	- 7.50
Alizarin Brown, conc.	.....lb.	—	2.50
Alizarin Orange	.....lb.	—	1.90
Alizarin Red, W. S. Paste	.....lb.	5.00	- 10.00
Alizarin Yellow G.	.....lb.	—	1.35
Alizarin Yellow R.	.....lb.	—	1.50
Chrome Black, Dom.	.....lb.	1.25	- 1.35
Chrome Black, Imp.	.....lb.	2.20	- 2.50
Chrome Blue	.....lb.	2.50	- 2.75
Chrome Green, Dom.	.....lb.	1.50	- 1.70
Chrome Red	.....lb.	—	2.00

BASIC COLORS:

Auramine, Single O. Dom.	.....lb.	—	2.25
Auramine, Double O. Imp.	.....lb.	—	3.50
Bismarck Brown Y.	.....lb.	.90	- 1.00
Bismarck Brown R.	.....lb.	1.20	- 1.30
Chrysoidine R.	.....lb.	—	1.00
Chrysoidine Y.	.....lb.	—	.90
Crystal Violet	.....lb.	5.00	- 5.25
Emerald Green, Crystals	.....lb.	—	8.00
Green Crystals, Brilliant	.....lb.	6.00	- 7.00
Indigo 50 p.c. paste	.....lb.	—	.75
Fuchsin Crystals, Dom.	.....lb.	4.00	- 5.00
Fuchsin Crystals, Imp.	.....lb.	12.00	- 12.50
Magenta Acid, Dom.	.....lb.	4.25	- 5.00
Magenta Crystals, Imp.	.....lb.	10.00	- 12.00
Malachite Green, Crystals	.....lb.	—	4.50
Malachite Green, Powd.	.....lb.	—	3.50
Methylene Blue, tech.	.....lb.	2.25	- 3.50
Methyl Violet	.....lb.	2.60	- 2.75
Phosphine G. Domestic	.....lb.	7.00	- 10.00
Valonin B, ex. con't.	.....lb.	—	27.00
Valonia, solid, 65 p.c. tan.	.....lb.	5.00	- 6.00
Victoria Blue B.	.....lb.	5.00	- 5.50
Victoria Blue, base, Dom.	.....lb.	—	6.00
Victoria Green	.....lb.	6.00	- 7.00
Victoria Red	.....lb.	7.00	- 8.00
Victoria Yellow	.....lb.	7.00	- 8.00

NATURAL DYESTUFFS

Anatto, fine	.....lb.	.32	- .33
Seed	.....lb.	.25	- .37
Carmin No. 40	.....lb.	5.25	- 5.50
Cochineal	.....lb.	.65	- .80
Gambier, see tanning.	.....lb.	—	—
Indigo, Bengal	.....lb.	2.75	- 3.00
Oudes	.....lb.	2.25	- 2.75
Guatemala	.....lb.	2.00	- 2.25
Kurpaha	.....lb.	2.00	- 2.25
Madras	.....lb.	.90	- 1.10
Madder, Dutch	.....lb.	.25	- .28
Nutgalls, blne Aleppo	.....lb.	.35	- .40
Chinese	.....lb.	.34	- .36
Persian Berries	.....lb.	—	—
Quercitron Bark, see tanning.	.....lb.	—	—
Turmeric, Madras	.....lb.	1.75	- .14
Aleppay	.....lb.	—	.10

DYEWOODS

Barwood	.....lb.	.06	- .08
Camwood, chips	.....lb.	.18	- .20
Fustic, sticks	.....ton	30.00	- 35.00
Chips	.....lb.	.05	- .06
Hyperic, chips	.....lb.	.07	- .09
Logwood Sticks	.....ton	40.00	- 45.00
Chips	.....lb.	.035	- .055

Quercitron, see tanning.

Red Saunders

EXTRACTS

Archil, Double	.....lb.	.17	- .20
Triple	.....lb.	—	.19
Concentrated	.....lb.	.20	- .25
Cutch, Mangrove, seen tanning.	.....lb.	—	—
Rangoon, boxes	.....lb.	.16	- .18
Liquid	.....lb.	.12	- .14
Tablet	.....lb.	.14	- .15
Cudbear, French	.....lb.	—	—
English	.....lb.	.22	- .26
Concentrated	.....lb.	—	—
*Nominal	.....lb.	—	—

Flavine	.....lb.	1.00	- 1.50
Fustic, Solid	.....lb.	.22	- .27
Crystals 100 p.c.	.....lb.	.30	- .40
Extract 42 deg.	.....lb.	.14	- .165
Liquid, 51 deg.	.....lb.	.15	- .19
Gall	.....lb.	.28	- .30
Hematin Extract 51 deg.	.....lb.	.14	- .15
Crystals, 100 p. c.	.....lb.	.30	- .32
Hyperic, liquid, 51 deg.	.....lb.	—	.24
Indigo, natural	.....lb.	2.00	- 2.50
Extract	.....lb.	.26	- .30
Indigotine, 100 p.c. pure	.....lb.	3.00	- 3.50
Logwood, solid	.....lb.	—	.25
Crystals, 100 p.c.	.....lb.	—	.23
51 deg., Twaddle	.....lb.	.12	- .17
Osage Orange, Extract 42 deg.	.....lb.	.09	- .10
Crystals, 100 p.c.	.....lb.	—	.20
Paste	.....lb.	—	.10
Persian Berries	.....lb.	—	—
Quebracho, see tanning.	.....lb.	—	—
Quercitron, 51 deg.	.....lb.	.065	- .075
Powdered, 100 p.c.	.....lb.	.13	- .14

MISCELLANEOUS DYESTUFFS

Albumen, Egg	.....lb.	1.45	- 1.55
Blood, imported	.....lb.	.80	- .85
Domestic	.....lb.	.55	- .60
Prussian blue	.....lb.	.70	- .80
Soluble	.....lb.	.70	- .80
Turkey Red Oil	.....lb.	.15	- .20
Zinc Dust, prime heavy	.....lb.	.12	- .14
100-lb. tins	.....lb.	—	.12
520-lb. casks	.....lb.	—	.11
Carload lots	.....lb.	—	.10

DEXTRINES AND STARCHES

British Gum	.....per 100 lbs.	8.00	- 8.50
Dextrine, Corn, white or yellow	.....per 100 lbs.	6.75	- 7.00
Potato, white or canary	.....lb.	.17	- .18
Starch, Powd., bags & bbls.	.....lb.	—	5.35
Pearl, Globe, bags & bbls.	.....lb.	—	5.20
Potato, Domestic	.....lb.	.075	- .08
Imported, duty paid	.....lb.	.08	- .085

RAW TANNING MATERIALS

Algarobilla	.....ton	185.00	- 200.00
Divi Divi	.....ton	74.00	- 76.00
Hemlock Bark	.....ton	15.00	- 16.00
Mangrove, African, 38 p.c.	.....ton	110.00	- 125.00
Bark, S. A.	.....ton	60.00	- 65.00
Myrobalans	.....ton	50.00	- 60.00
Oak Bark	.....ton	15.00	- 16.00
Ground	.....ton	—	17.50
Quercitron Bark rough	.....ton	13.00	- 15.00
Ground	.....ton	27.00	- 28.00
Sumac, Sicily, 27 p.c. tan.	.....ton	—	120.00
Virginia, 25 p.c. tan.	.....ton	—	120.00
Valonia Cups	.....ton	—	—
Beard	.....ton	—	—
Wattle Bark	.....ton	—	90.00

TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan.	.....lb.	.03	- .035
bbls.	.....lb.	—	.035
Clarified, 25 p.c. ton, bbls.	.....lb.	—	—
Crystals, ordinary	.....lb.	—	—
Clarified	.....lb.	—	—
Gambier, 25 p. c. tan.	.....lb.	.17	- .18
Common	.....lb.	.09	- .11
Cuba, Singapore	.....lb.	.18	- .20
Cuba, Java	.....lb.	.14	- .16
Hemlock, 25 p.c. tan.	.....lb.	.05	- .055
Larch, 25 p.c. tan.	.....lb.	.045	- .045
Crystals, 50 p.c. tan.	.....lb.	.085	- .085
Mangrove, 55 p.c. tan.	.....lb.	.09	- .10
Liquid, 25 p.c. tan.	.....lb.	.08	- .10
Muskego, 23-30 p.c. tan,	.....lb.	.015	- .015
50 p.c. total solids	.....lb.	—	Nominal
Myrobalans, liq., 23-25 p.c. tan	.....lb.	—	Nominal
*Solid, 50 p.c. tan.	.....lb.	—	Nominal

*Nominal

Oak Bark, liquid, 23-25 p.c. tan.	.....lb.	—	.055
Quebracho, liquid, 35 p.c.	.....lb.	—	.075
*35 p.c. tan, untreated	.....lb.	—	.065
*35 p.c. tan, bleaching	.....lb.	—	.06
*Solid, 65 p.c. tan, ordinary	.....lb.	—	.12
*Clarified	.....lb.	—	—
Spruce, liquid, 20 p.c. tan,	.....lb.	50 p.c. total solids	.015
Sumac, liquid, 25 p.c. tan	.....lb.	—	.065
Valoni. solid, 65 p.c. tan.	.....lb.	—	Nominal

Oils

ANIMAL AND FISH

(Carloads)

Cod Newfoundland	.....gal.	1.12	- 1.14
Domestic, prime	.....gal.	1.10	- 1.12
Norwegian	.....bbl.	—	100.00
Liver, Newfoundland	.....bbl.	90.00	- 92.00
Degras, American	.....lb.	.07	- .075
English	.....lb.	.075	- .085
Neutral	.....lb.	.14	- .18
Horse	.....lb.	.11	- .12
Lard prime	.....gal.	—	1.85
Off prime	.....gal.	—	1.75
No. 1	.....gal.	1.52	- 1.53
Extra, No. 1	.....gal.	—	1.40
No. 2	.....gal.	1.27	- 1.28
Menhaden, Light strained	.....gal.	—	1.13
Yellow, bleached	.....gal.	—	1.20
White, bleached, winter	.....lb.	—	1.22
*Northern, crude	.....gal.	—	—
Southern, crude, f.o.b. plant	.....gal.	—	.95
Neatsfoot, 20 deg.	.....gal.	—	2.25
30 deg., cold test	.....gal.	—	2.05
40 deg., cold test	.....gal.	—	1.90
Dark	.....gal.	1.60	- 1.65
Prime	.....gal.	1.75	- 1.80
Oleo Oil	.....lb.	.25	- .30
Red (Crude Oleic Acid)	.....lb.	—	.16
Saponified	.....lb.	—	.16
Sperm bleached winter	.....gal.	1.95	- 2.00
38 deg., cold test	.....gal.	1.90	- 1.95
45 deg., cold test	.....gal.	1.90	- 1.95
Natural winter, 38 deg., cold test	.....gal.	1.95	- 2.00
Stearic, single pressed	.....lb.	—	.25
Double pressed	.....lb.	—	.25
Triple pressed	.....lb.	—	.25
Tallow, acidless	.....gal.	1.50	- 1.55
Prime	.....gal.	1.45	- 1.50
Whale, natural winter	.....gal.	1.30	- 1.35
Bleached, winter	.....gal.	1.35	- 1.40

VEGETABLE OILS

Castor, No. 1 bbls.	.....lb.	—	.21
Cases	.....lb.	—	.23
No. 3	.....lb.	1.18	- 1.19
China Wood Oil, bbls.	.....lb.	2.25	- 2.35
Coconut, Dom. Ceylon, bbls.	.....lb.	1.75	- 1.8
Tanks	.....lb.	.17	- .175
Cochin, bbls. bbls., Dom.	.....lb.	1.05	- 1.1
Tanks	.....lb.	1.18	- 1.19
Manila, tanks	.....lb.	.17	- .175
Corn, refined, bbls.	.....lb.	—	.25
Crude, Tanks	.....lb.	—	.20
Cottonseed, Crude, f. o. b.	.....lb.	1.19	- 1.20
mills, in tanks	.....lb.	20	- 21
Summer, yell., prim, bbl.	.....lb.	20	- 21
*White	.....lb.	23	- 25
*Winter, yellow	.....lb.	23	- 25
Linseed, raw car lots	.....gal.	—	1.57
5 barrel lots	.....gal.	—	1.50
Boiled, 5-bbl. lots	.....gal.	—	1.93
Double Boiled, 5-bbl. lots	.....gal.	—	1.94
*Olive, denatured	.....gal.	2.50	- 2.55
Edible	.....gal.	3.10	- 3.20
Foots	.....lb.	1.19	- 1.25
Palm, Lagos casks	.....lb.	1.65	- 1.65
*Benin	.....lb.	—	1.65
Niger	.....lb.	.15	- .155
*Palm Kernel, domestic	.....lb.	—	—
*Imported	.....lb.	—	—
Peanut Oil, refined	.....lb.	.26	- .27
Crude, f.o.b. mills	.....lb.	.23	- .24
Oriental, coast, tanks	.....lb.	.21	- .22
Poppy Seed	.....gal.	2.75	- 3.00
Rapeseed, ref'd, bbl.	.....gal.	1.60	- 1.65
*Blown	.....gal.	1.65	- 1.70
*Sesame, domestic, edible	.....gal.	—	2.50
*Imported	.....gal.	—	—
Soya Bean, Tanks, Pac. Coast	.....lb.	1.65	- 1.65
New York, bbls.	.....lb.	1.75	- 1.8

GREASES, LARDS, TALLOW

(New York Markets)

Grease, white	.....lb.	1.17	- 1.175
Yellow	.....lb.	1.25	- 1.25
House	.....lb.	1.25	- 1.25
*Nominal	.....lb.	—	—

Amidine Black

A Direct Color

Send for product samples and quotations

Manufactured by

JOHN CAMPBELL & CO.

Established 1876 — Incorporated 1907

75 Hudson Street, New York, N. Y.

Branches

Boston Philadelphia Providence
Charlotte, N. C., and Toronto, Can.

WORKS: Newark, N. J.

DICKS, DAVID CO., Inc.

299 Broadway
New York City

*Offer without engagement
for 1920 delivery*

**Anthraquinone
Malachite Green**
Large Crystals

*Prices and Samples
Upon Request*

Menthol

AND

Camphor

Oriental Department

**Chas. Morningstar & Co.
Inc.**

349 Broadway
New York

Fast Vat Dyes

made by

**SOCIETY OF CHEMICAL
INDUSTRY**

BASLE, SWITZERLAND

“CIBA”

Blue, Violet, Yellow, Red, Scar-
let and Bordeaux

“CIBANON”

Green, Yellow and Orange

Obtainable now in rapidly increasing supplies.
Samples and quotations from

A. KLIPSTEIN & CO.

654 Greenwich Street, New York

Greases, Cocoa, Shellac, Naval Stores, and Miscellaneous

Grease, Brown	lb.	.08	—	.10
Lard City	lb.	—	—	.23
Compound	lb.	—	—	.25
Stearine, lard	lb.	—	—	.32
Oleo	lb.	—	—	.21
Tallow, edible	lb.	—	—	.17½
City, prime	lb.	—	—	.14

(Chicago Markets)

Tallow, edible	lb.	—	—	.17
City Fancy	lb.	—	—	.16½
Prime Packers	lb.	—	—	.16
Grease, Choice White	lb.	.16	—	.16½
"A" White	lb.	.15½	—	.16
"B" White	lb.	.14½	—	.15
Yellow	lb.	.13	—	.13½
Brown	lb.	.11½	—	.12½
Bone	lb.	.09½	—	.10½
House	lb.	.12½	—	.13
Stearine, prime oleo	lb.	—	—	.20½
Lard, city steam	lb.	—	—	.23

OIL CAKE AND MEAL

Cottonseed Cake, f.o.b. Texas ..	—	—	—	.54½
f.o.b. New Orleans	—	—	—	—

Cottonseed, Meal, f.o.b. Atlanta ..	—	—	—	.56.00
Columbia	—	—	—	.53.00
New Orleans	—	—	—	—
Corn Cake	short ton	\$5.00	—	.57.00
Meal	short ton	\$9.00	—	.64.26
Linseed cake, dom.	short ton	—	—	.60.00
Linseed Meal	short ton	—	—	.60.00

*Nominal.

Miscellaneous

COCOA				
Accura	lb.	.18	—	.19
Bahia	lb.	.20	—	.22
Caracas	lb.	.25	—	.28
Hayti	lb.	—	—	.18
Maracalbo	lb.	.28	—	.30
Trinidad	lb.	.21½	—	.23
SHELLAC				
"D. C.	lb.	—	—	—
"Diamond "I"	lb.	—	—	—
"Fine Orange	lb.	—	—	—
Second Orange	lb.	—	—	—
"T. N.	lb.	1.25	—	1.30
A. C. Garnet	lb.	—	—	—

*Button	lb.	—	—	—
Regular bleached	lb.	—	—	—
Bone, dry	lb.	—	—	1.40
Superfine	lb.	—	—	1.35

NAVAL STORES

(Carloads at dock)

*Spirits Turpentine in bbls. gal.	—	—	—	1.65
Wood Turpentine, steam distilled, bbls.	gal.	—	—	1.35
*Turpentine, Destructive distilled, bbls.	lb.	1.50	—	1.60
Pitch, prime	200 lb. bbl.	.650	—	10.95
Rosins, B	—	—	—	17.00
D	—	—	—	17.30
F	—	—	—	17.50
G	—	—	—	18.25
H	—	—	—	18.40
I	—	—	—	18.50
K	—	—	—	19.00
M	—	—	—	20.00
N	—	—	—	21.00
WG	—	—	—	22.00
WW	—	—	—	23.00
Tar, kiln-burnt	bbls.	—	—	14.50

Imports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from Dec. 12 to Dec. 19

ACIDS—Citric, 10 kegs, F. Stern & Co., London; Tartaric, 100 cks., Banca Italiana, Messina; 9 cks., 6 cks., F. Stern & Co., London

ALBUMEN—2 cs., Brown Bros. & Co., London

ALCOHOL—1 bbl., Brown Bros. & Co., London

ALMONDS—Bitter, 20 bgs., Canadian Bank of Commerce, Barcelona; 150 bgs., London City & Midland Bank, Barcelona; 50 bgs., Wood & Sellick, Barcelona; 200 bgs., London & Liverpool Bank of Commerce, Palermo; 100 bgs., Irving National Bank, Palermo; 140 bgs., Ocean Shipping Co., Messina; 600 bgs., Hills Bros. & Co., Palermo; 260 bgs., Konig Bros. & Co., Farragosa; 200 bgs., Irving National Bank, Marseilles; 100 bgs., Kidder, Peabody & Co., Marseilles; 500 bgs., Lazard Freres, Marseilles; 251 bgs., W. West, Marseilles; 187 bgs., Brown Bros. & Co., Marseilles; 700 bgs., Brown Bros. & Co., Marseilles; Sweet, 60 cts., T. M. Duchesne & Sons, Palermo; 26 bxs., M. Valospin, Barcelona; 1,200 bxs., Irving National Bank, Malaga; 100 cs., Brown Bros. & Co., Seville; 300 bxs., 400 cs., Irving National Bank, Malaga; 190 bxs., R. H. Macey & Co., Malaga; 1,034 bxs., Citizens National Bank, Malaga; 115 bxs., Hilker & Beltsch & Co., Malaga; 100 bxs., Brown Bros. & Co., Malaga; 150 bxs., J. Wile & Sons, Malaga; 67 cs., British Bank of South America, Malaga; 20 cs., Bank of New York, Malaga

AMIDOPYRINE—1 cse., Brown Bros. & Co., London; 2 cs., C. L. Huisking, Havre

AMMONIUM PERCHLORATE—2,000 bgs., British Minister of Shipping, London

ANTIMONY SULPHIDE—8 cs., Stanley, Doggett & Co., London; 2 cks., F. O. Nelson & Co., Inc., London; 405 cks., Balfour, Williamson & Co., Antofagasta

ARGOLS—49 cks., W. R. Grace & Co., Valparaiso

ARSENIC—Flour, 40 cks., W. Schall & Co., Hamburg; Red, 100 cks., W. Schall & Co., Hamburg

BALSAM COPAIBA—150 cs., H. A. Astlett & Co., Para; 22 cs., Brown Bros. & Co., Para; 100 cs., George Amsinck & Co., Para

BARK—Cinchona, 10 bls., H. R. Lathrop & Co., London; 1,164 bgs., Perry, Ryer & Co., London; 124 bgs., Brown Bros. & Co., London; Mangrove, 364 bgs., Willard, Hayes & Co., St. Marc; Medicinal, Miscellaneous, 3,695 bgs., 1,132 bls., Smith & Schlipper, Capetown; 2,289 bgs., Lee, Higginson & Co., Capetown; 2,867 bgs., Hammond & Carpenter Co., Capetown; 5,750 bgs., J. F. Mosser & Co., Capetown; 1,198 bls., C. A. Andresen & Sons, Capetown; Quillaya, 102 bls., W. R. Grace & Co., Valparaiso; Tree, 5 bgs., G. D. Campbell & Co., Para; Wattle, 3,829 bls., E. J. Haley, Inc., Capetown

BAY RUM—10 cs., Canadian Trading Co.,

St. Thomas; 30 cs., American Express, St. Thomas; 30 cs., Schieffelin & Co., St. Thomas; 20 cs., J. Alcantara & Sons, St. Thomas; 5 bbls., Park & Tilford, St. Thomas; 25 bbls., R. L. Fuller & Co., St. Thomas

BEANS—Caster, 8 bgs., Blackburn Trading Co., Porto Plata; 27 bgs., Hartmann Pacific Co., Port de Paix; Cocoa, 94 bgs., Middleton, Barbados; 129 bgs., E. F. Darrell & Co., St. Lucia; 429 bgs., Middleton & Co., St. Lucia; 367 bgs., 320 bgs., Middleton & Co., Dominica; 25 bgs., Gillespie Bros. & Co., Dominica; 64 bgs., Van Dyk & Lindsay, Dominica; 100 bgs., W. R. Grace & Co., Porto Plata; 100 bgs., Yglesias & Co., Porto Plata; 89 bgs., 7 bgs., 86 bgs., J. J. Julia & Co., Porto Plata; 70 bgs., Yglesias & Co., Porto Plata; 102 bgs., W. Schall & Co., Porto Plata; 90 bgs., W. R. Grace & Co., Porto Plata; 118 bgs., Austin Nichols & Co., Para; 620 bgs., Brown Bros. & Co., Para; 195 bgs., Blanke-Wenker Candy, Rotterdam; 35 bgs., E. Steinberg & Co., Sierre Leone; 32 bgs., R. L. Nicholson & Co., Sierre Leone; 3,000 bgs., Franc De l'Afrique Occidentale, Sierre Leone; 1,518 bgs., British Bank of West Africa; 2,038 bgs., Colonial Bank, Sierre Leone; 150 bgs., J. Harris, Limon; 300 cks., A. O. Anderson Trading Co., Limon; 11 bgs., R. F. Downing & Co., Porto Cabello; 22 bgs., 82 bgs., Habicht, Braun & Co., Porto Cabello; 57 bgs., H. E. Botzow, Porto Cabello; 165 bgs., Mercantile Bank of America, Inc., Curapano; 250 bgs., Graham Hinckley & Co., Curapano; 194 bgs., W. Schall & Co., Paramaribo; 110 bgs., Curacao Trading Co., Paramaribo; 217 bgs., R. Desvernine, Venezuelan ports, 500 bgs., Yglesias & Co., Inc., Venezuelan ports

BERRIES—Juniper, 17 bgs., F. B. Vandegrift & Co., Messina; 1,000 bgs., Brown Bros. & Co., Messina; Medicinal, Miscellaneous, 25 kegs, Banca Commerciale Italiana, Naples

CALCIUM HYPOPHOSPHITE—40 cs., Scott & Bowne, London

CAMPOR—Slabs, 25 cs., Brown Bros. & Co., London

CARBON—Blocks, 9 bxs., Globe Shipping Co., Rotterdam

CASEINE—1,000 bxs., Baring Bros. & Co., Melbourne

CHEMICAL COMPOUNDS—7 cks., Red Hand Composition Co., London; 3 cs., Johnson & Sons, London

CHEMICALS—Miscellaneous, 20 cs., Merck & Co., Hamburg; 3 cs., Roessler & Hasslacher Chemical Co., Hamburg; 2 cks., Brown Bros. & Co., Hamburg

CINCHONIDIN SULPHATE—14 cs., Niagara Electro-Chemical Corporation, Rotterdam

CUTCH—38 bgs., R. Hilliers Son & Co., London

CUTTLEFISH BONE—25 cs., Maxum, Hershey Seed Co., Gibraltar; 40 cs., S. B. Penick & Co., Gibraltar

DIVI-DIVI—2,022 bgs., Paris & Co., Curacao; 994 bgs., Federal Export Corporation, Curacao; 1,750 bgs., Paris & Co., Maracalbo; 924 bgs., R. Desvernine La Guayra; 370 bgs., 150 bgs., American Trading Co., Maracalbo; 5,327 bgs., Curacao Trading Co., Curacao; 1,169 bgs., R. Desvernine, Curacao; 1,554 bgs., Federal Export Corporation; 1,471 bgs., Suzarte & Whitney, Curacao

DRUGS—Crude, 2 bbls., General Transatlantic Co., Havre; Miscellaneous, 1 cs., Mallinckrodt Chemical Works, Havre; 1 cs., Norwich, Pharmacal Co., London; 6 cs., International Forwarding Co., Rotterdam; 8 cs., Fritzsche Bros., Hamburg

DYESTUFFS—2 cs., A. Gibbs & Co., Sydney; Alizarine, 3 cks., L. A. Foster & Co., London; 2 cks., Irving National Bank, London; Gambier, 1,088 cs., L. Littlejohn & Co., Singapore; Indigo, 25 chests, Brown Bros. & Co., London

EXTRACTS—Licorice, 225 bgs., H. Utard, Barcelona; Logwood, 5 cs., United Fruit Co., Kingston; Quebracho, 1,390 bgs., National City Bank, Buenos Aires; 1,008 bgs., Brown Bros. & Co., Buenos Aires; 3,356 bgs., New York Quebracho Extract Co., Buenos Aires; Rennet, 10 bbls., Phoenix Cheese Co., Copenhagen

FLOWERS—Lily of the Valley, 80 cs., McHutchinson & Co., Rotterdam; 120 cs., International Forwarding Co., Rotterdam; 88 cs., International Forwarding Co., Hamburg; 228 cs., Loechner & Co., Hamburg; Linden, 17 bls., R. Hillier's Sons Co., Messina; 20 bls., Peek & Velsor, Messina; 10 bls., Schieffelin & Co., Messina; Rose, 2 cs., F. B. Vandegrift & Co., Rotterdam

FRUIT SALTS—10 cs., 5 cs., 100 cs., Brown Bros. & Co., London; 100 cs., Lanman & Kemp, London; 5 cs., C. Hermanos, London; 10 cs., Coffin, Reddington & Co., London; 100 cs., McKesson & Robbins, London

GELATIN—1 cs., H. W. Goldsmith, Havre; 29 cs., P. Zuhke & Co., Rotterdam; Lorange, 30 cs., J. P. Smith & Co., London; Photo, 15 cs., J. P. Smith & Co., London; Powdered, 300 bgs., Milligan & Higgins, Rotterdam

GLYCERIN—2 cs., Park & Tilford, London; 120 bbls., Brown Bros. & Co., Marseilles; Crude, 3 drums, Chas. F. Garrigues & Co., St. Johns

GUMS—Aloes, 54 cs., American Trading Co., Curacao; 170 cs., C. F. Hernandez Sons & Co., La Guayra; 121 cs., Suzarte & Whitney, La Guayra; Arabic, 597 cs., India Products Co., London; 74 bgs., Thurston & Braidich, London; Myrrh, 11 bgs., W. H. Steiner & Co., London; Tragacanth, 9 cs., New York Cuba Mall Steamship Co., London; 55 bgs., Brown Bros. & Co., London; 15 cs., Thurston & Braidich, London

HERBS—Medicinal, 4 cs., G. Carlo, Palermo; 19 bls., 154 bls., Brown Bros. & Co., Messina; 6 bgs., Gallagher & Asche, Barcelona; 36 bgs., P. E. Anderson & Co., Barcelona

DRUGS
CHEMICALS
COLORS
DYE STUFFS



ORES
MINERALS
OILS
WAXES

Salicylic Acid
Magnesia
Ceresine Wax

LIDLAW, KELLEY & CO. INC.

14 Platt St. NEW YORK.

Telephone John 1566

Gum Arabic
White Sorts
SPOT



Established 1856

FRAZAR & CO.

30 Church St., New York

Cable Address
Fydama, Newyork

Telephone
Cort. 2013

Sole Agents

CARAPANAYOTI & CO., London and Khartoum

If You Are a Buyer

of chemicals, drugs, dyes or oils in large quantities, DRUG & CHEMICAL MARKETS "reflects actual market conditions better than any other trade paper." It will keep you posted on the cost of your crude supplies. But this journal is more than a market reporter. Every issue contains special articles by recognized authorities. It makes a feature of Washington news—taxes and tariffs—and reports all new developments in these industries.

Subscription, \$4.00 a year. Sample copy on request.

If You Are a Seller

of these commodities in original packages in the domestic or foreign market, DRUG & CHEMICAL MARKETS reaches the big buyers here and abroad. It now has the largest exclusive drug and chemical circulation of any commercial publication in the United States. It has real readers because it is compact, accurate and prompt. It is a logical advertising medium for you. It will prove to be a profitable medium.

Advertising rates on application.

DRUG & CHEMICAL MARKETS

3 PARK PLACE

NEW YORK

11 bgs., Gallagher & Asche, Barcelona; 20 bxs., P. E. Anderson & Co., Barcelona; 488 bls., Brown Bros. & Co., Calamata; 9 bgs., Banca Commerciale Italiana, Messina
HOPS—26 bls., S. S. Steiner, Rotterdam; 129 bls., American Export Co., Hamburg; 93 bls., C. Ullmann & Co., Hamburg; 10 bls., B. Schwartz & Sons, Hamburg
HYDROSULPHITE—10 bbls., Helvetia Commercial Co., Rotterdam
INSECTICIDE—9 bgs., Maltus & Ware, London
IODINE—232 bbls., 322 kegs, S. E. Nash & Louis Watjen, Ltd., Bilbao
IRON OXIDE—34 csks., P. Myrille, London
ISINGLASS—30 bls., American Trading Co., London
KERNELS—Medicinal Miscellaneous, 126 bgs., Brown Bros. & Co., Constantinople; Pignolia, 30 cs., Smith & Schipper, Messina
LEAD SULPHIDE—7 cs., Stanley, Doggett & Co., London
LEAVES—Coca, 172 bls., Merck & Co., Rotterdam; 91 bls., Maywood Chemical Works, South Pacific Ports; Medicinal, Miscellaneous, 92 bls., Anderson & Co., Lisbon; 44 bls., Brown Bros. & Co., Gibraltar; Patchouli, 35 bls., L. Littlejohn & Co., Penang; Sage, 60 bgs., Brown Bros. & Co., Gibraltar; Senna, 19 bls., 131 bls., Brown Bros. & Co., London; Thyme, 20 hampers, G. Follio, Naples
LECITHES—8 cs., Midwood Chemical Co., Bordeaux; 6 cs., American Express Co., Bordeaux
LEMON JUICE—295 cs., A. D. Shaw & Co., Melbourne
LIME CITRATE—100 csks., Perry, Ryer & Co., Dominica; 128 csks., Chas. Pfizer & Co., Palermo; Tartrate, 9 csks., National City Bank, Tarragona
LIME JUICE—73 bbls., Middleton & Co., Dominica; 6 bbls., R. Desveraine, Martinique; 721 cs., Van Dyk & Lindsay, Dominica; 8 csks., Magnus, Mabec & Reynard; 60 cs., Perry, Ryer & Co., Dominica; 2 csks., E. F. Darrell & Co., Dominica; 4 csks., Gillespie Bros. & Co., Dominica; Raw, 100 csks., F. B. Vandegrift & Co., Dominica
LOGWOOD—1 lot, E. M. Raphael & Co., Jacmel; 1 lot, H. Mann & Co., Gonaves
LYCOPODIUM—12 kegs, Brown Bros. & Co., London; 19 bls., Gimbel Bros., London
MANGANESE PASTE—20 bxs., Jersey Asbestos Co., London
MEAL, MEDICINAL—1 cs., R. F. Downing & Co., London
MEDICINES—Miscellaneous, 1 cs., Brown Bros. & Co., London; 13 cs., H. Nevin, London
MENTHOL—25 cs., Brown Bros. & Co., London; 2 csks., C. B. Richard & Co., Hamburg
MERCURY—100 bts., McKesson & Robbins, London; 56 flasks, Transoceanic Commercial Corporation, Havana; 25 drums, 100 flasks, 150 bts., 600 bts., Brown Bros. & Co., London
MORPHINE MURIATE—2 cs., Brown Bros. & Co., London
OILS—Almond, 5 cs., Brown Bros. & Co., London; Cod, 82 csks., Redden & Martin, Halifax; 200 csks., Canada Bank of Commerce, St. Johns; 1 cs., Bowring & Co., St. Johns; 200 csks., Redden & Martin, St. Johns; 100 csks., Canadian Bank of Commerce, St. Johns; 200 bbls., National Sponge & Chamois Co., St. Johns; 6 csks., Graham Hinckley & Co., St. Johns; 515 bbls., Brown Bros. & Co., St. Johns; Codliver, 5 bbls., Graham Hinckley & Co., St. Johns; 50 bbls., Brown Bros. & Co., St. Johns; Cottonseed, 50 bbls., W. R. Grace & Co., St. Marc; Fusel, 277 csks., United Chemical & Organic Products Co., Hamburg; Haarlem, 2 cs., Kronfeld, Saunders & Co., Rotterdam; Linseed, Raw, 172 csks., W. Van Doorn, Rotterdam; 5 drums, F. W. Simonds & Sons, Antwerp; 458 bbls., Cook & Swan, London; Olive, 25 csks., E. R. Squibb & Sons, Lisbon; 50 csks., American Express Co., Lisbon; 150 csks., Nicelle Olive Oil Co., Lisbon; 100 cs., Adams Express Co., Lisbon; 23 cs., Beech Nut Packing Co., Lisbon; 4 cs., Rockhill & Vieter, Lisbon; 5 cs., 102 cs., George Lueders & Co., Lisbon; 106 cs., Brown Bros. & Co., Palermo; 7 bxs., Renken & Yates Smith, Barcelona; 100 cs., A. D. Shaw & Co., Bordeaux; 75 cs., American Express Co., Bordeaux; 761 cs., A. D. Shaw & Co., Gibraltar; 30 cs., A. Murphy & Co., Marseilles
OILS ESSENTIAL—6 cs., 5 drums, Brown Bros. & Co., London; 9 cs., Fritzsche Bros., Hamburg; Bay, 16 cs., R. Moelhausen, St. Lucia; 12 cs., Brown Bros. & Co., St. Lucia; Bergamot, 50 cs., Chas. Pfizer &

Co., Palermo; 24 1/4 cs., Bank of New York, Messina; 200 1/4 cs., Baring Bros. & Co., Messina; 100 1/4 cs., Brown Bros. & Co., Messina; 168 1/4 cs., Brown Bros. & Co., Messina; Cassia, 10 cs., A. A. Stillwell, London; 25 cs., Brown Bros. & Co., London; Eucalyptus, 5 drums, 1 drum, 4 drums, Brown Bros. & Co., London; Lemon, 132 cs., Brown Bros. & Co., Lime, 1 cs., Middleton & Co., St. Lucia; 1 cs., R. Desveraine, Martinique; 15 cs., Middleton, Dominica; 11 cs., Van Dyk & Lindsay, Dominica; 10 cs., Van Dyk & Lindsay, Dominica; 3 cs., Gillespie Bros. & Co., Dominica; 1 cs., Genessee Pure Food Co., London; Linaloe, 1 cs., Transoceanic Commercial Corporation, Havana; 3 cs., Hanover National Bank, Havana; Orange 5 cs., Middleton & Co., Dominica; 6 cs., Colonial Bank, Kingston; 1 cs., 20 cs., 21 cs., Brown Bros. & Co., London; Peppermint, 114 cs., 40 cs., Brown Bros. & Co., London

OPIUM—16 cs., McKesson & Robbins, Liverpool; 8 cs., National City Bank, Salonica; 10 cs., Comptoir National d'Escompte de Paris et New York, Salonica; 10 cs., Brown Bros. & Co., Salonica; 1 cs., T. Pavia, Salonica; 25 cs., 13 cs., Brown Bros. & Co., Constantinople; 18 cs., Brown Bros. & Co., London

PARALDEHYDE—12 cs., Merck & Co., Hamburg

PERFUMERY—31 cs., A. H. Smith & Co., Havre; 3 cs., B. French, Havre; 7 cs., A. Bourjois & Co., Havre; 3 cs., Grant & Co., Havre; 3 cs., G. W. Sheldon & Co., Havre; 1 cs., P. Jarry, Havre; 4 cs., B. E. Levy, Havre; 1 cs., W. Banberger, Havre; 2 cs., R. H. Macy & Co., Havre; 4 cs., E. H. Burr & Co., Havre; 14 cs., J. Utard, Havre; 5 drums, Brown Bros. & Co., London; 5 cs., Morana & Co., Lisbon; 3 cs., George Lueders & Co., Lisbon; 1 cs., W. E. Burns, London; 17 cs., Ungerer & Co., London; 4 cs., F. C. Lutni & Co., Rotterdam; 8 cs., 8 cs., George Lueders & Co., Barcelona; 3 cs., George Lueders & Co., Malaga; 1 box, L. Roselli, Cadiz; 1 bx., J. W. Lyons, McKesson & Robbins, Seville; 154 cs., A. Bourjois & Co., Bordeaux; Synthetic, 3 cs., A. L. Van Ameringen, Rotterdam

PHARMACEUTICAL PRODUCTS—19 cs., E. Fougere & Co., Havre; 1 cs., G. D. Kuyper Bros., London

POTASSIUM SALTS—Muriate, 3,350 bgs., Brown Bros. & Co., Rotterdam; Prussiate, Yellow, 150 csks., M. Van Doorn, Rotterdam; Sulphite, 5 cs., C. B. Richard & Co., Hamburg

QUININE SULPHATE—12 cs., Samson Bros. & Co., London; 25 cs., 13 cs., Brown Bros. & Co., London; 25 cs., National City Bank, London

RASPBERRY JUICE—558 csks., Czechoslovak Commercial Corporation of America, Hamburg

ROOTS—Belladonna, 32 bgs., Brown Bros. & Co., London; Canagria, 20 csks., Hanover National Bank, Havana; Dandelion, 44 bgs., J. L. Hopkins & Co., London; 129 bls., Murray & Nickell Manufacturing Co., London; Gentian, 450 bls., McKesson & Robbins, Gibraltar; Ipecac, 32 bls., McKesson & Robbins, London; Licorice, 54 bls., MacAndrews & Forbes Co., Barcelona; 6,770 bls., 88 bgs., MacAndrews & Forbes Co., Smyrna; Medicinal, Miscellaneous, 12 bgs., J. L. Hopkins & Co., Barcelona; 250 bgs., 120 bgs., American Express Co., Bordeaux; Orris, 180 bls., 74 bgs., Farmers Loan & Trust Co., Messina; 75 bls., A. Chiris & Co., Messina; 15 bgs., Parke Davis & Co., Messina; 96 bgs., Murray Nickell Manufacturing Co., Messina; 68 bgs., Dodge, Olcott Co., Messina; 75 bgs., A. Stallman & Co., Messina; 143 bgs., 157 bgs., Brown Bros. & Co., Messina; Fingers, 1 cs., F. B. Vandegrift & Co., Messina; Squill, 90 bgs., National Bank of New York, Palermo

SACCHARIN—1 cs., Murclini & Co., Inc., Valparaiso
SANDALWOOD—3,327 pieces, C. H. Pearson, Porto Cabello

SEED—Anise, 25 bgs., McKesson & Robbins, Malaga; Canary, 839 bgs., Van Beekelen Bros., Buenos Aires; Caraway, 100 bls., Archibald & Lewis, Rotterdam; 200 bls., Habicht, Braun & Co., Rotterdam; 200 bgs., Brown Bros. & Co., Bordeaux; Castor, 157 bgs., H. Mann & Co., Port de Paix; Celery, 10 bgs., 30 bgs., Brown Bros. & Co., Gibraltar; Colchicum, 3 bgs., F. B. Vandegrift & Co., Messina; Cumin, 48 bgs., Brown

Bros. & Co., Gibraltar; Dill, 54 bgs., J. L. Hopkins & Co., London; 68 bgs., Murray & Nickell Manufacturing Co., London; Foenugreek, 50 bgs., Brown Bros. & Co., Bordeaux; Linseed, 38,572 bgs., American Linseed Co., Rosario; 5,298 bgs., Brown Bros. & Co., Rosario; 26,506 bgs., L. Dreyfus & Co., Buenos Aires; 10,132 bgs., Brown Bros. & Co., Buenos Aires; 9,595 bgs., Brown Bros. & Co., Montevideo; Mustard, 160 bgs., London & Liverpool Bank of Commerce, London; 178 bgs., Catz, American Co., Rotterdam; 508 bgs., Herbst Bros. & Co., Copenhagen; 65 bgs., D. Allester, Copenhagen; 80 bgs., Caldwell & Co., Copenhagen; 67 bgs., Old & Wallace, Copenhagen; 68 bgs., Frame & Co., Copenhagen; 100 bgs., Brown Bros. & Co., Copenhagen; 400 bgs., 75 bgs., Brown Bros. & Co., London; 250 bgs., Standard Bank of South America, London; Poppy, 13 bgs., Catz, American Co., Rotterdam

SILVER PRECIPITATE—8 cs., American Refining & Smelting Co., Bilbao; Sulphide, 307 cs., Balfour, Williamson & Co., Bilbao; 253 cs., S. E. Nash & Louis Watjen, Bilbao

SOAP—Castile, 300 bxs., Equitable Trust Co., Barcelona; 231 cs., Schavarrla Bros., Barcelona; 200 bxs., A. Bourjois & Co., Barcelona; 300 bxs., Lockwood, Brackett & Co., Barcelona; 20 bxs., Gaston, Williams & Wigmore, Inc., Barcelona; 100 bxs., Brown Bros. & Co., Barcelona; 200 cs., McKesson & Robbins, Seville; Medicinal, Miscellaneous, 39 cs., E. Bourjois & Co., London; 15 cs., Brown Bros. & Co., London; Olive, 250 bxs., Lazard Freres, Messina; 650 cs., Lockwood, Brackett & Co., Malaga

SODIUM SALTS—Hypophosphite, 20 cs., Scott & Bowne, London; Prussiate, 92 csks., National Aniline & Chemical Co., London; 7 csks., National City Bank, London; Prussiate, Yellow, 40 kegs, Brown Bros. & Co., London; Salicylate and Theobromine, 4 cs., C. L. Huisking, Inc., Rotterdam; Tartaric, 10 csks., Brown Bros. & Co., London

SPICES—Capsicum, 215 bls., 32 bgs., Brown Bros. & Co., London; Chillies, 431 bgs., Brown Bros. & Co., London; Cloves, 20 cs., Pacific Trading Corporation, Penang; Ginger, 100 bgs., 140 bgs., 100 bgs., 100 bgs., Brown Bros. & Co., London; 394 bgs., 176 bgs., London & Liverpool Bank, London; Mace, 25 cs., Pacific Trading Corporation of America, Penang; Nutmeg, 100 cs., Brown Bros. & Co., Singapore; 46 cs., Pacific Trading Corporation of America, Penang; 14 kegs, Benckendorf, Berger & Co., London; Pepper, Black, 37 bgs., Brown Bros. & Co., Singapore; 463 bgs., Littlejohn & Co., Singapore; 218 bgs., Pacific Trading Corporation Co., Penang; 184 bgs., Brown Bros. & Co., Penang; Red, 15 cs., Brown Bros. & Co., London; 7 bgs., Santiago Guena, Cadiz; Pimento, 20 cs., American Express Co., Malaga

SPIRITS CUCUMBER—1 cs., Park & Tilford, London

SPONGES—1 cs., Dodge & Olcott Co., Havre; 1 cs., F. B. Vandegrift & Co., Havre; 1 cs., Brown Bros. & Co., London; 9 bls., Brown Bros. & Co., Singapore

TARTAR—77 bgs., Tartar Chemical Works, Lisbon; 92 bgs., Chas. Pfizer & Co., Bordeaux; 20 csks., 250 bgs., American Express Co., Bordeaux; Cream Tartar, 19 csks., American Express Co., Bordeaux; 10 csks., A. Klipstein & Co., Messina; Crude, 64 bgs., National City Bank of New York, Buenos Aires

TOMATO PASTE—500 cs., F. Del Galeso, Naples

WATER—Medicinal, 2 cs., J. Vitori & Co., Barcelona; Mineral, 50 cs., J. Wanamaker, Havre; 22 cs., Brown Bros. & Co., Havre; 50 cs., A. Meyers Bordeaux; 125 cs., United States Forwarding Co., Hamburg; 435 cs., Brown Bros. & Co., Nantes

WAX—Bees, 16 bgs., Sugar Products Co., Antilles; 7 seroons, Blackburn Trading Co., Porto Plata; 4 seroons, W. Schall & Co., Porto Plata; 3 seroons, Gustave Amsinck & Co., Inc., Porto Plata; 82 bgs., Ultramarines Corporation, Porto Plata; 50 bgs., Yglesias & Co., Porto Plata; 50 bgs., W. Schall & Co., Porto Plata; 3 bgs., W. Schall & Co., Porto Plata; Carnauba, 150 bgs., Lazard Freres, Ceara; 170 bgs., Lazard Freres, Ceara; 100 cs., George Amsinck & Co., Inc., Ceara; 50 bgs., 43 bgs., London & Liverpool Bank, Ceara; Mineral, 334 bgs., National City Bank, Copenhagen; Refined, 100 cs., McKesson & Robbins, London

New Incorporations

United Synthetic Drug Corporation, Manhattan, capital 150 shares preferred stock, \$100 each; 500 shares preferred stock, no par value; active capital \$17,500. J. Schere, J. Rice, W. A. Young, 120 Broadway, New York.

Empire Size and Chemical Corporation, Rensselaer, N. Y., capital \$100,000. Coating and paper mill supplies. W. Robertson, C. P. Fritts, E. MacIntyre, Albany.

Raritan Color Co., Manhattan, capital \$10,000. Dyes, drugs and chemicals. W. H. and B. and F. J. Parks, 149 Broadway, New York.

Druggists Concentrates Co., Dover, Del., capital \$100,000. W. I. N. Lofland, R. Frank Jackson, Mark M. Cole, Dover.

Unangest Pharmacies, Inc., Dover, Del., capital \$100,000. William F. O'Keefe, George G. Steigler, E. E. Alberlee, incorporators for trust company, Wilmington, Del.

United Vegetable Oil Refinery, Inc., Brooklyn, N. Y., capital 700 shares of preferred stock, \$100 each; 1,000 shares of common stock, no par value; active capital \$80,000. S. W. Stevens, Jr., W. D. Kay, L. J. Ellinger, Hotel Chatham, New York.

Pep Tonic Co., Bronx, capital \$10,000. Drugs and chemicals. L. and A. Rigelson, L. Leibowitz, 480 Claremont Parkway, Bronx, N. Y.

Adelphi Paint and Color Works, Inc., Manhattan, capital \$80,000. A. Levin, A. Shinske, D. F. Price, 11 Nicholas ave., Brooklyn, N. Y.

Capital City Chemical Co., Wilmington, Del., capital \$200,000. Manufacture of chemicals. Incorporators represent local trust company.

Trutona Medicine Co., Louisville, Ky., capital \$250,000. C. R. Maddux, A. H. Stowers, J. Grover Galloway, George N. Moseley.

Standard Wax and Import Co., Manhattan, capital 3,000 shares of common stock, no par value; active capital \$30,000. J. G. Roberts, G. B. Heath, I. J. Nichols, 115 Broadway, New York.

Booker Drug Co., Norfolk, Va., capital \$100,000. C. W. Henderson, J. H. Greene, J. S. Booker, Norfolk.

The Nurse Institute, Inc., Buffalo, capital \$100,000. Chemists and druggists. Ella E. Meahi, Edna Sickmon, Anna G. Cavariagh, Buffalo, N. Y.

Bay State Wholesale Drug Co., Boston, Mass., capital \$50,000. Abraham Hollogub, Samuel C. Clayton, Edward Clayton, Malden, Mass.

Rockland Finishing Co., Haverstraw, N. Y., capital 50,000 shares common stock no par value; active capital \$2,000,000. H. A. Hatch, E. C. House, L. Semple, 2 Rector st., New York.

Southern Olive Oil Co., Bronx, capital \$5,000. V. and D. C. Della, G. Lerde, 754 East 187th st., New York.

Mine-Myale, Inc., Manhattan, capital \$150,000. Drugs, chemicals and toilet articles. J. J. Leahy, Jr., E. B. Myers, R. McCord, 59 Wall st., New York.

Raritan Aniline Works, Lincoln, N. J., capital \$100,000. Manufacture alkalies, acids, chemicals and drugs. Edgar B. Hamby and Thomas B. Busch, Somerville, N. J.; George Z. Derr, Dunellen, N. J., are the incorporators.

Mulhens & Kropff, Inc., Manhattan, capital \$150,000.

D. J. Mulster, W. and W. Kropff, 25 West 45th st., New York.

Bregeat Corporation of America, Dover, Del., capital \$1,500,000. To procure methods and ways for the recovery of volatile solvents and for use thereof. Harold J. Gallagher, Mount Vernon, N. Y.; Winthrop W. Kellogg, Port Washington, N. Y.; Elliott C. Smith, Paterson, N. J.

Dissolutions—The Lamar Chemical Works, Manhattan.

Authorization—Herculean Products Co., Delaware, druggists sundries, capital \$600,000. Representative, M. M. Friedmann, 524 Broadway, New York.

Notes of the Courts

The suit of the Federal Terra Cotta Co. against the Butterworth-Judson Corporation has been settled out of court.

American Aniline Products, Inc., has sued the Huntsville (Ala.) Knitting Co., for \$8,238 for dyes sold and delivered in March last. About \$3,000 was paid on account by the Huntsville company, the complaint says.

The Appellate Division of the Supreme Court has decided the appeal of the Central Dyestuffs and Chemical Co. from a judgment in the Municipal Court in favor of American Aniline Products, Inc., against the Central Dyestuffs and Chemical Co.

The Anglo-American Drug Co. was sued in the Supreme Court by the S. Brackley Novelty Co. on contracts for cartons, picture frames, and kites, through Baroness and Chaityn who allege breach of contract and loss of profit. The Anglo-American Drug Co., through Henry C. Quimby, requested a bill of particulars, and Judge Greenbaum has granted an order granting most of the defendant's demands.

UNITED STATES EXPORTS OF GLYCERIN (Special to DRUG AND CHEMICAL MARKETS)

Washington, D. C., Dec. 23.—A balance of \$10,000 in our favor was shown on our foreign trade in glycerin during October, according to a report of the Department of Commerce. Exports during the month totaled 88,796 pounds, valued at \$22,628, the imports being \$12,094. Our most important customer for glycerin is Japan, to which country we shipped 18,000 pounds, followed by Argentina, with slightly over 17,000 pounds. The following table, prepared by the Department, shows the month's exports to leading countries:

Countries	Pounds	
Mexico	4,603	\$855
Cuba	4,082	904
Argentina	17,091	3,999
Brazil	5,493	894
Chile	8,590	1,753
Hongkong	15,482	3,807
Japan	18,000	6,384

The Western Chemical Co., Hutchinson, Minn., is to build a manufacturing plant in Minneapolis, to cost about \$125,000. A. G. Kranz is president.

The Union Seed & Fertilizer Co., Henderson, N. C., is to rebuild its plant recently destroyed by fire, with loss of \$300,000.

The Perfect Products Co., Memphis, Tenn., recently organized with a capital of \$100,000, is to operate a plant for the manufacture of chemicals.

Books of Trade Interest

ANALYSIS OF BABBITT. By James Brakes, chief chemist Chateaugay Ore and Iron Company, member of the American Chemical Society, etc. 1st edition. 12 mo., 160 pages, cloth. Troy, N. Y. Allen Book and Printing Co.

The user of this book will find in it a presentation of about all of the known facts concerning anti-friction alloys first introduced by Isaac Babbitt and to which his name is almost universally applied. The original babbitt metal, it is stated, was composed of 90 parts of tin and 10 parts of copper, and later, the name was applied to a mixture of tin, antimony and copper. Time changed the formula and mode of manufacture, so that at the present time there are many anti-friction alloys on the market that are called babbitt, the change of formula being altered and influenced by the high price of tin and, also, by the general satisfaction that other alloys have given. Following the general information given, the author takes up in order the properties of the metals entering into the manufacture of babbitt, such as antimony, tin, lead, copper, etc., their methods of analysis, the chapter on each metal containing also a complete bibliography of the analysis of the particular metal. Then follows a chapter on miscellaneous analysis of babbitt, containing such information as the determination of magnesium and bismuth, qualitative analysis of babbitt, and a bibliography of white metal analysis. The concluding chapter is devoted to notes on the manufacture of babbitt, examples of calculations, sampling, and a bibliography of works of reference.

INDUSTRIAL RECONSTRUCTION PROBLEMS.

This bulletin contains a complete report of the National Conference held in New York City last March under the auspices of the Society of Industrial Engineers. This society was organized in 1917, with the original purpose of providing the greatest possible war service by the industrial engineers of the country, and which is now being continued to provide a medium through which persons who are applying scientific methods to the solution of problems of production and distribution may exchange views and co-ordinate their efforts. A number of notable addresses which were delivered before the conference appear in full in this bulletin, among them being the following: "Business Ethics," B. S. Cutler, chief of the Bureau of Foreign and Domestic Commerce, Washington; "Foreign Trade as a Factor in Financial and Industrial Readjustment," R. E. Agger, assistant to the President, National City Bank of New York; "Organizing Industries for Economic Production," C. E. Knoepfel, New York; "Costs in a Competitive Market," Clinton H. Scovell, Boston; "Work of the Bureau of Standards as Related to Industrial Commercial Problems," Dr. S. W. Stratton, director of the Bureau of Standards, Washington.

THE GIRL AND THE JOB. By Helen Christine Hoerle and Florence B. Saltzberg of the Vocational Guidance Committee, Wadleigh High School, New York City. 12 mo., 266 pages, cloth. New York, Henry Holt and Company.

This book is intended to help teachers of girls in the upper grades of the elementary schools and in the first years of the secondary schools, in interesting pupils in their choice of a vocation. Much of the information given has been derived from reports and interviews with people who have succeeded in their chosen occupations, and to this extent, what the authors have to say reflects most of the conditions confronting girls in search of jobs, as well as the opportunities which an occupation presents to the average young woman. As a general proposition, the business world offers the broadest field of work for the aver-

age girl who does not or cannot go to college for a highly specialized training, a matter of common knowledge to those familiar with conditions existing in large centers of population. Office help is largely recruited from the ranks of young women, and they find employment as office girls, file clerks, stenographers, bookkeepers and the like in ever increasing numbers.

One has to read this book, however, to become aware of the large number of occupations which offer opportunities to trained women. Not all women are encouraged to take up the professions, but the conditions, courses of training, etc., are in each instance very clearly set forth so that the young woman who has leanings toward a particular profession may know beforehand what awaits her if she elects to follow such a calling. Those interested in the ever-broadening field of opportunities for women will find this book both interesting and informative.

TECHNO-CHEMICAL RECEIPT BOOK. Compiled and edited by William T. Brann, and William H. Wahl, Ph.D. New and enlarged edition to which have been added many new formulas and processes. Illustrated. 12 mo., 516 pages, cloth. New York, Henry Carey Baird & Co.

This is a new edition of a work which has been long known to workers in many technical lines, containing thousands of receipts and processes relating to chemical technology and their practical application in the useful arts and industries. Most every manufacturer has experienced occasions when a receipt or suggestion for a process would have proved profitable to him, and the chances are that he will find something relating to his need in this book. The materials for the book have been principally derived from German technical literature, which, the compilers state, is especially rich in receipts and processes that are to be relied on; most of them having been practically tested by competent men before given to the public. The statement is made that the matter in previous editions has been read and revised, and the scope of the work augmented by the addition of numerous miscellaneous receipts, thereby bringing the book well down to date. Besides the alphabetical arrangement of the formulas, a carefully prepared index serves to render reference to the various receipts and processes an easy matter.

SCIENTIFIC TESTS OF COLORED GLASS FOR OPTICAL PURPOSES. By E. E. Shreiner. 5 1/4 x 6 3/4 inches. 84 pages. New York, McCoy and Stillwell.

The lack of authentic information on the subject of "colored glass" for optical purposes, except for occasional fragmentary notes scattered throughout scientific papers and trade publications has prompted the author to publish the information he has assembled here, which, he states, was gathered for his personal use. Under the section of "historical optics" he has assembled in chronological order an outline of the principal facts relating to the origin of glass and lenses. Then follow sections on the various tests, color, glass terms, definitions of terms relating to light, lenses, mirrors, prisms, and a description of the various kinds of artificial eyes. It would appear that glass eyes have been in use for many centuries, and very few modifications of the original form have been introduced.

The W. G. Cleveland Drug and Surgical Co., St. Louis, has leased for a period of ten years, the four-story and basement building at 1109 Locust street. The company was established in St. Louis in March, 1918. W. G. Cleveland, the president of the W. G. Cleveland Drug and Surgical Company of St. Louis, is also president of the W. G. Cleveland Company of Omaha, Neb., a physicians' supply and surgical instrument house, capitalized at \$150,000.

Patents

Copies of patents may be obtained as follows: United States, 5 cents each; send to United States Patent Office, Washington, D. C.; French, one franc; send to M. M. Belin et Cie, 56 Rue des Francs-Bourgeois, Paris, for patents of the years 1902-1907, and to L'Imprimerie Nationale, 88 Rue Vieille du Temple, Paris, for patents of later date; German, one mark; send to Patent Office, Berlin. British, eight pence; send to Patent Office, London. Postage must be sent for British patents. Stamps are not accepted in payment for U. S. patents. In ordering patents, the number, name of patentee and subject of invention must be stated.

Granted Dec. 9, 1919

- 1,324,080—Frederic C. Bowman, New York, N. Y., assignor to General Chemical Company. Method of producing sodium fluoride.
- 1,324,093—John Young, Akron, and Winthrop W. Benner, Cuyahoga Falls, Ohio, assignors to the Firestone Tire and Rubber Company, Akron, Ohio. Process of reclaiming rubber.
- 1,324,119—Charles B. Jacobs, Bloomfield, N. J., assignor, by mesne assignments, to Air Reduction Company, Inc. Process for the production of alkali-metal cyanides.
- 1,324,140—Roland L. Andreau, Wilmington, Del., assignor to E. I. du Pont de Nemours & Company. Method of changing isoborneol into camphor.
- 1,324,143—Benjamin T. Brooks, Pittsburgh, Pa., assignor, by mesne assignments, to E. I. du Pont de Nemours & Company, Wilmington, Del. Manufacture of toluene.
- 1,324,173—Richard Ross, Waterville, Wash. Combined tooth brush and powder holder.
- 1,324,255—Olaf Jensen, Christiania, Norway, assignor to Norsk Hydro-Elektrisk Kvaestofabriksselskab, Christiania, Norway. Process of producing pure concentrated nitric acid and tetroxid of nitrogen.
- 1,324,256—William B. Langan, Hawley, Pa., assignor to Koscherak Siphon Bottle Works, Hoboken, N. J. Bottle-stopper.
- 1,324,318—Claude G. Miner, Berkeley, Cal., assignor to The Miner Chemical Corporation, San Francisco, Cal. Process of recovering alumina.
- 1,324,321—Harold G. Polk, Orient, S. Dak. Non-refillable bottle.
- 1,324,328—Gerhard Nicolaas Vis, Paris, France. Process of isolating salts of chromium.
- 1,324,354—Emanuel W. Kaiser, Newark, N. J. Bottle-closure.
- 1,324,443—Courtney Conover, Philadelphia, Pa. Apparatus for bringing about and controlling reactions between gases.
- 1,324,485—Nora J. Watt, Kew Gardens, N. Y., assignor to James A. Watt, New York, N. Y. Bottle-stopper.
- 1,324,538—Frank M. Boyles, Baltimore, Md., assignor to McCormick & Co. Oleoresin paste and process of making same.
- 1,324,577—James H. Baldwin, London, England. Device for preventing the fraudulent refilling of bottles and other containers for liquids.
- 1,324,580—William W. Birnstock, York, Pa., assignor to Hensch & Dromgold Company. Bottle-crate.
- 1,324,644—William P. Carter, Nashville, Tenn. Self-siphoning bottle-filling machine.
- 1,324,649—Henry V. Dunham, Mount Vernon, N. Y. Resinous condensation product and process of making same.
- 1,324,715—Chester E. Andrews, Pittsburgh, Pa., assignor to The Selden Company, Pittsburgh, Pa. Process of oxidation of aromatic bodies.
- 1,324,716—Chester E. Andrews, Pittsburgh, Pa., assignor to The Selden Company, Pittsburgh, Pa. Process of purification of crude anthraquinone.
- 1,324,717—Chester E. Andrews, Pittsburgh, Pa., assignor to The Selden Company, Pittsburgh, Pa. Treatment of anthracene press-cake.
- 1,324,727—Lloyd D. Gilbert, Phillip S. Taylor, John G. Dean, and Louis E. Elder, Victorville, Cal. Apparatus for collecting and isolating soluble salts from flue-gases.
- 1,324,753—Willard E. Swift, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass. Container for drinking cups.
- 1,324,761—Ray M. Carter, Baltimore, Md., assignor to U. S. Industrial Alcohol Company. Process of purifying iodine.

The Rector Chemical Corporation, of New York, has been dissolved. The New York offices were at 2 Rector street.

Decision on the Longworth bill and dye licensing system by the Senate Finance Committee is expected by the time Congress reconvenes after the holidays.

The Cronkhite Co. Inc., Boston, has bought the chemical and dyestuff interests of J. A. and W. Bird. The Cronkhite Co. is affiliated with large British concerns which gives them European outlets.

Business Brevities

The date for receiving proposals from the chemical trade to market surplus stocks of acids belonging to the Government has been postponed to Jan. 5.

Robert H. Bradley, president of the N. W. D. A. has been named as member of a board of seven commissioners to settle the street railway controversy at Toledo, O.

It is estimated that the gum chicle interests in the United States will be obliged to pay \$25,000 to the Mexican Government during the present season owing to the increase in the export duty from 31 to 36 cents, Mexican currency, per kilo.

The New York State Industrial Commission says the oil workers' earnings show a marked gain in November, and higher earnings were also reported in drugs and in paints and colors. No change in earnings appears in the miscellaneous chemicals industry.

Dr. A. H. Jacobi has been appointed adviser on dyes and pharmaceutical chemicals for the committee on organization of the Reparation Commission, Paris. Dr. Jacobi will be abroad several months, and will superintend the distribution of dyes turned over to the Commission by the Germans.

Spot tin has been well cleaned up. The average price paid was 54½¢ for nearby, and the market advanced at the close to 55¼¢, asked by importers for spot tin. For shipment from London sellers asked 55¼¢ and for shipment from the Straits as high as 56¼¢ was asked. London prices, as cabled the Metal Exchange on Friday, were: Standard, spot, £322 7s; futures, £323; Straits, spot, £322 10s; Eastern shipment, £321.

The November issue of Gaston, Williams and Wigmore's Bulletin has a front cover representing the "Alchemy of American Industry." A chemist is seated at a desk in a laboratory with a spirit lamp before him, from which have sprung vast industries pictured at the top of the page in mill, factories, ships, piers, derricks, machinery and cranes. The idea personifies the export and import business of the firm which now gathers the products of American manufacturers and transports them to every quarter of the globe.

The dispute over the contract of the War Department with the Jones and Laughlin Steel Co. for building 300 by-product coke ovens and the purchase of the output of toluol came up in the House of Representatives last week during the debate on the report of the Committee on War Expenditures. Representative Graham said the Government was defrauded of large sums by the terms of settlement with Jones and Laughlin. Representative Garrett explained that the Pittsburgh Claims Board made the settlement on estimates made by Major Falk.

A substitute bill for the Longworth measure, omitting the licensing system, is proposed. The plan is to have the Tariff Commission ascertain as nearly as practicable the dyestuff requirements of the country as to dyes that are made in the United States and also those not made here and announce lists of all such dyes as may be imported to meet these requirements. The two lists would be maintained under the jurisdiction of the commission—a prohibited list and an open list. Dye consumers could buy whatever they pleased on the open list, and by stating their six months' needs as to all dyes on the prohibited list could have their requirements supplied.

THEOBROMINE

Pure Alkaloid

**Theobromine
Sodio-Salicylate**

Chemically the same as Diuretine)

Caffeine

Manufactured by

Societeit voor Chemische Industrie Katwijk

Katwijk-an-Zee, Holland

Frank L. May & Co., Incorporated

99 John Street

New York, N. Y.

Sole Agents for U. S. and Canada

MILK SUGAR**NATIONAL BRAND**National Brand Sugar of Milk has been
the standard of quality the world over
since 1883**POWDERED GRANULAR
IMPALPABLE CRYSTALS****THE ROSEMARY CREAMERY CO.
NATIONAL MILK SUGAR CO. DIVISION**

15 Park Row, New York

CHURCH & DWIGHT CO.

80 Maiden Lane

New York

**Bicarbonate of Soda
Sal Soda
Monohydrate of Soda****Want Ads****EMPLOYEES FURNISHED.** Stores sold—also furnished; All States. Positions. Doctors, Dentists, Veterinarians furnished. F. V. KNIEST, Omaha, Neb., Estab. 1904.**CHEMIST** acquainted with commercial distillation on a factory production basis. Resident of Bronx only need apply. BOX 396 care of this journal.**COMPOUNDER**, thoroughly acquainted with Essential and Synthetic Perfume Oils and Flavoring Extracts. BOX 397 care of this journal.**PHTHALIC ANHYDRID—C.P. and Technical
PHTHALIC ACID—Technical**

Spot Contract Any Quantity

THE WESTERN RESERVE CHEMICAL CO.
3434 E. 93rd Street CLEVELAND, OHIO**THE YAKUGYO SHUHO**The Monthly English Edition of
"The Weekly Druggist"**Sole and Powerful Journal to Promote the Trade of
Chemicals, Drugs, Dyestuffs, Etc., Etc.**Subscription: Yen 1.50 per annum
Advertisement on application**THE YAKUGYO SHUHO SHA**13, Shichichone, Tamachi, Akasaka,
Tokyo, Japan**SAVE YOUR COPIES
OF
DRUG & CHEMICAL MARKETS**We supply a substantial BINDER which holds the copies
of Drug & Chemical Markets for one year. Price \$1.00 net
postpaid.

D. O. HAYNES & CO., Publishers, 3 Park Place, N. Y.

HEINE & CO.

7 Platt St. NEW YORK U. S. A.

Perfumers' Raw MaterialsMost highly concentrated oils and synthetics for
all classes of perfumery, toilet waters,
creams, powders, soaps, etc.Requests
for Samples or
Information invited

Potassium Permanganate Saccharine

CARUS CHEMICAL COMPANY

Manufacturer
LA SALLE, ILL., U. S. A.

Naphthalene Balls Naphthalene Crystals

The Chatfield Manufacturing Co.
Cincinnati, Ohio, U. S. A.

DANA & COMPANY, Inc.
111 Broadway New York, N. Y.
EASTERN SELLING AGENTS

Carbonate of Potash (All Grades)

Potash Alum Lump
(U.S.P.)

Arsenic

George F. Taylor Commission Co.

Established 1873
2 Rector Street New York

Lemon Oil Orange Oil

Italian and West Indian

F. C. LUTHI & CO.

277 BROADWAY
NEW YORK, N. Y.

Jordan Coal Tar Products, Inc.

13 Cliff Street, New York

Specialists in

Benzols Toluols Xylois
Solvent Naphthas Heavy Naphthas
Creosote Oils (All Grades) Dead Oils
Anthracenes Tars Pitches
Naphthalene (Crude—Flake)
Phenol-Cresylic Acid Phenol-Cresols

Sales Agents
Manufacturers Importers Exporters

WE OFFER FOR PROMPT DELIVERY

GUAIACOL COMPOUNDS
EXTRACT MALEFERN
CHRYSAROBIN
ARECOLIN HYDROBROM.
SODA CACODYLATE
SCAMMONY RESIN, Etc., Etc.

MAY & BAKER, LTD.

Manufacturing Chemists and Exporters
BATTERSEA, LONDON, ENGLAND
Cable Address: BISMUTH, LONDON

INNIS, SPEIDEN & Co., Inc.

Established 1819

Incorporated 1906

Industrial Chemicals

Import COMMISSION MERCHANTS Export

46 Cliff St., New York

Chicago Boston Philadelphia Cleveland

Cable address:—Innis, New York: Codes A.B.C., Lieber's,
Western Union, Private

PFALTZ & BAUER, Inc.

300 PEARL STREET
NEW YORK CITY

BAY RUM

Imported

ALPHA NAPHTHYLAMIN ORTHO TOLUIDIN TOLIDIN

QUALITY FIRST

SHIPMENT PROMPT

NEWPORT CHEMICAL WORKS, Inc.

120 BROADWAY

NEW YORK CITY

Substitution

is always risky and often expensive.
Especially is this the case when
treating delicate shades of colors.
Standardize your anilines with our

Sulphate of Soda

Pure

Powdered

Anhydrous

**Free from Ammonia and Iron,
and Strictly Neutral**

The Kalbfleisch Corporation

**31 Union Square, West
New York**

TRADE



CHEMICALS

We Manufacture:

**Acetyl Salicylic Acid
N. & N.R. or B.P.**

Bromine

Carbon Tetrachloride

Caustic Soda 76%

Chloroform U.S.P.

Iron Chloride

Sulphur Chloride

Also 75 other Products



THE DOW CHEMICAL COMPANY

**MIDLAND
MICHIGAN**

**90 WEST STREET
NEW YORK CITY**

We solicit your inquiries for

BALSAMS Copaiba — Fir Oregon — Tolu ESSENTIAL OILS

**Wormseed — Sweet Orange — Mustard Artificial
Lemon — Cloves — Wintergreen Artificial, Etc.**

TERPINEOL — BAY RUM — LIQUID STYRAX

MAGNUS, MABEE & REYNARD, Inc.

257 Pearl Street, New York City, U. S. A.

1919

D

D

SUBS

VOL.

O

W

10

H

122

Dye

C

G

N

N

Y
T
Y